MICRO POWER PUMPS
1G

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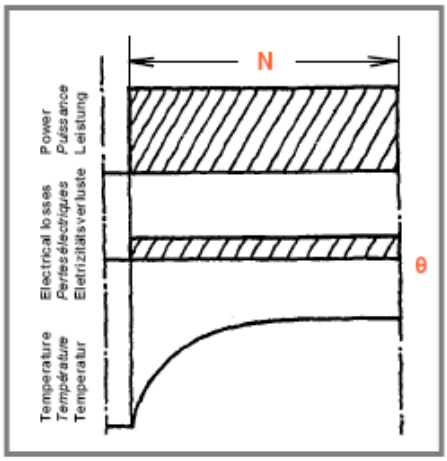
SALES ORGANISATION

DUTY TYPES DIRECT CURRENT MOTORS

Representative chart

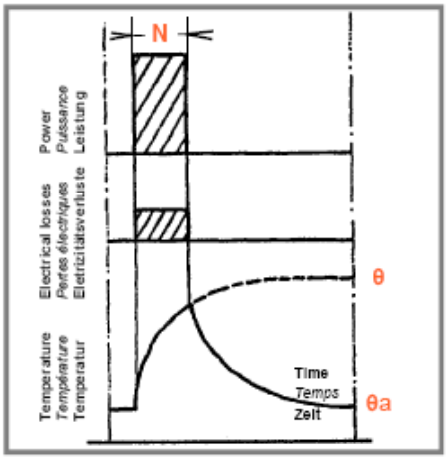
S1
Continuous Duty

Duty type consisting of working at a constant load during a certain time long enough to reach the thermal equilibrium.



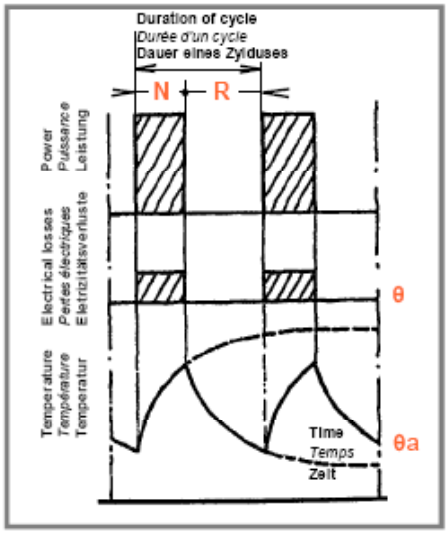
S2
Temporary Duties

Duty types consisting of working at constant load during a determined period shorter than the one necessary for reaching the thermal equilibrium, followed by a rest the duration of wich should be long enrough to reach the same temperature as the cooling medium.



S3
Periodical intermittent Duties

Types of dutiesconsisting of a series of identical cycles each of them including a working time at constant load and a rest time, the durations being not sufficient for reaching the thermal equilibrium during the heating periods as well as the cooling periods.



Legend:
- N: Working at nom. load
- R: Rest
- D: Starting
- θ: Temperture during Continuous Duty
- θa: Temperature of cooling medium

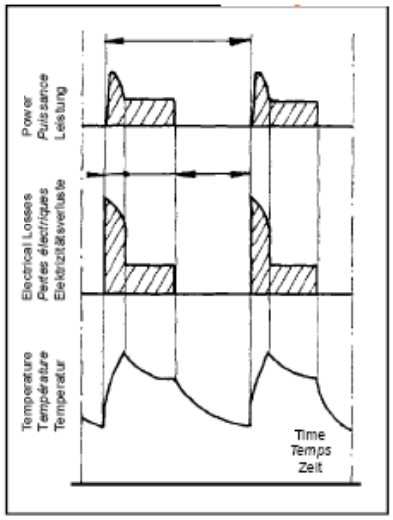
DUTY TYPES
DIRECT CURRENT MOTORS

S4

Intermittent starting Duties

Types of duties consisting of a series of identical cycles ,each of them including a starting time, a working time at constant load and a rest time. The working time and the rest time are short enough not to reach the thermal equilibrium during a cycle.
In these duties, the motor stops either due to the natural slowing-down after switching off or by means of a brake such as a mechanical brake which does not cause complementary heating-up of the coils.

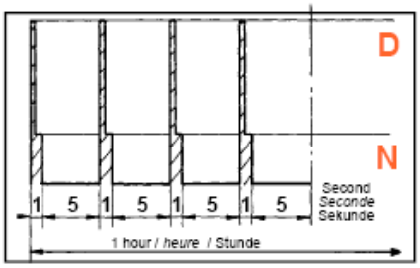
Representative chart



S4a

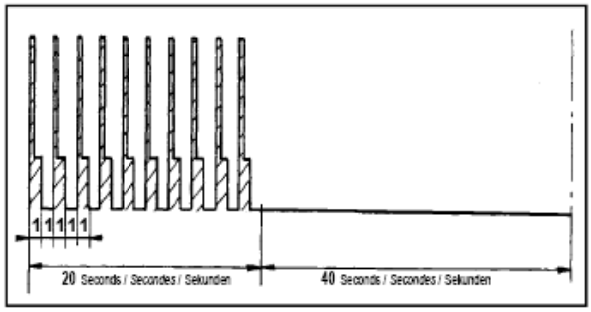
Specific Duties

Determines the number of startings per hour according to the S4 cycle here after mentioned :
- 1 second of working time
- 5 seconds of rest time.



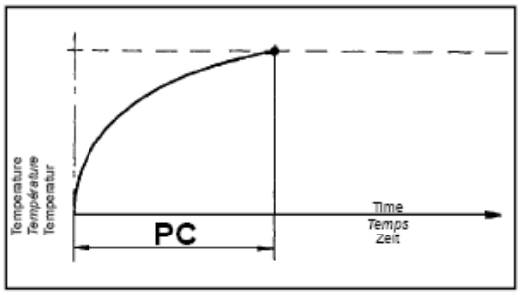
S4b

Determines the number of startings per hour according to the S4 cycle here after mentioned :
- 1 second of working time
- 1 second of rest time during 20 seconds;
- 40 seconds of rest time.



PC

Critical moment at permanent functioning S2 under load in minutes before destruction.

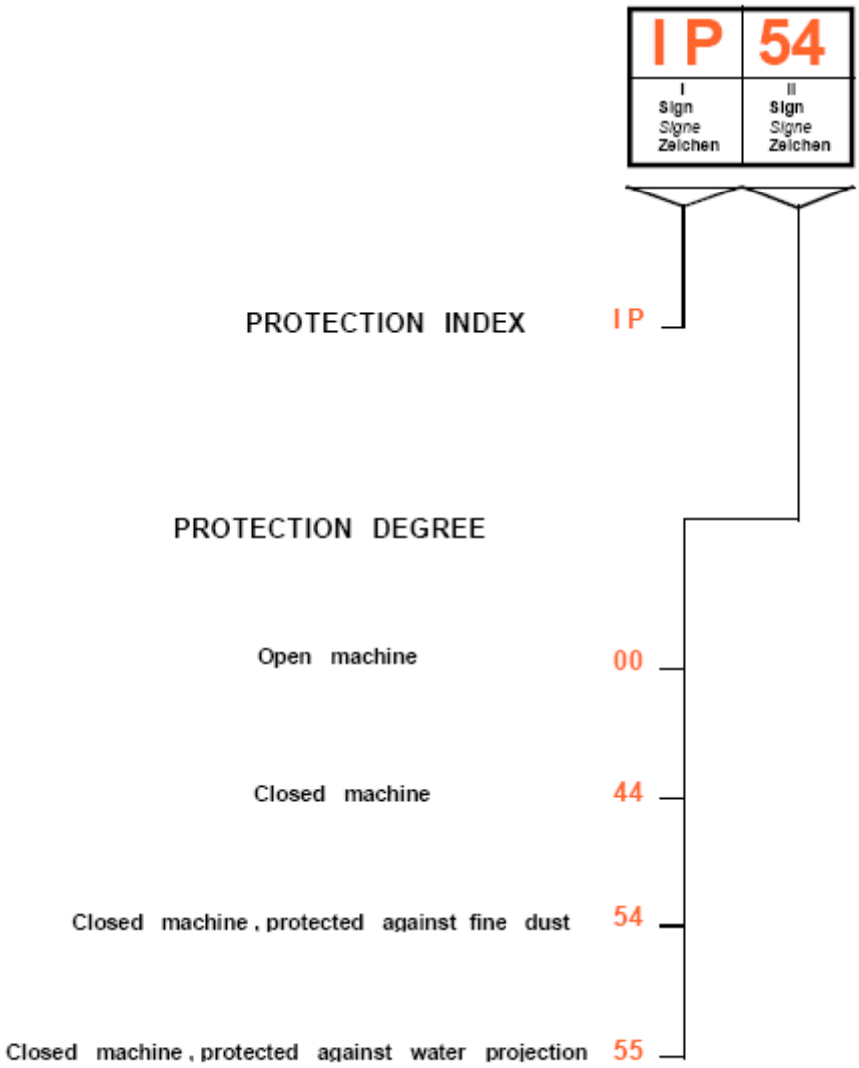


Legend :

N Working at nom. load
R Rest
D Starting
θ Temperature during Continuous Duty
θa Temperature of cooling medium

Documentation :
French Standards NFC 51 111
German Standards VDE 530-1

PROTECTION and TIGHTNESS of the DIRECT CURRENT and ALTERNATIVE CURRENT MOTORS



DIRECT CURRENT

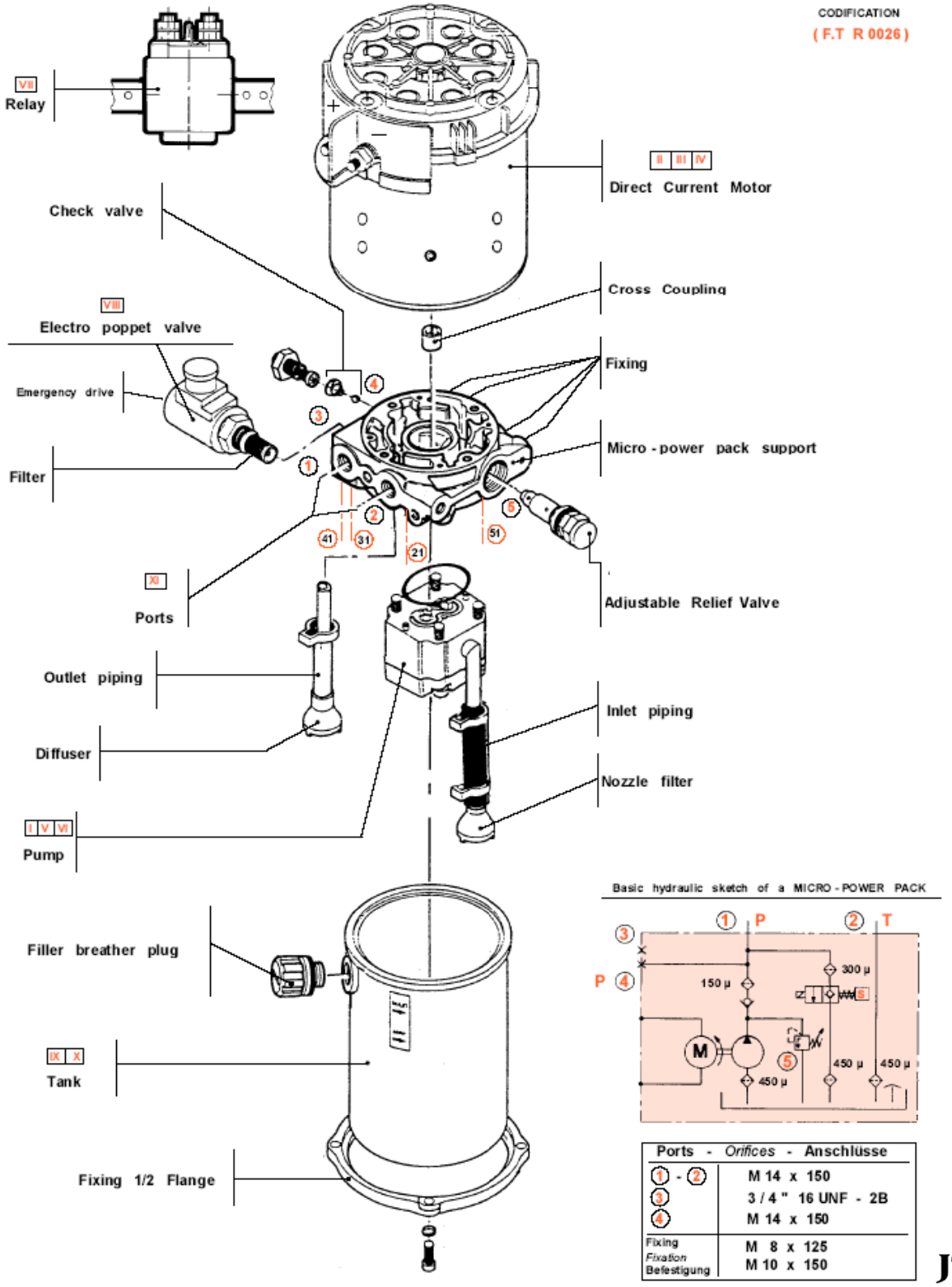
Code *Code* Kode	Power *Puissance* kW Leistung		Flow *Débit* Fördermenge
	12 V	24 V	
FE	0,175	0,175	0,2 to - *à* - bis 12 l / min
* KE		0,6	
HE	0,8	1	
AE	1,1	1,2	

* Voltage 24 and 48 V

DIRECT CURRENT

01	HE	2	C	100	T	R	14	F	1	20	X	2	N
I Sign Signe Zeichen	II Sign Signe Zeichen	III Sign Signe Zeichen	IV Sign Signe Zeichen	V Sign Signe Zeichen	VI Sign Signe Zeichen	VII Sign Signe Zeichen	VIII Sign Signe Zeichen	IX Sign Signe Zeichen	X Sign Signe Zeichen	XI Sign Signe Zeichen	XII Sign Signe Zeichen	XIII Sign Signe Zeichen	XIV Sign Signe Zeichen

CODIFICATION
(F.T R 0026)



TECHNOLOGICAL COMPOSITION of the MICRO - POWER PACK

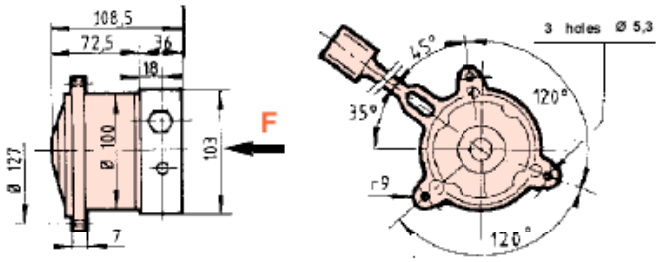
DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	FE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

(F.T R 0026)

MOTOR TYPE DIRECT CURRENT (Sign - Signe - Zeichen II - III - IV)



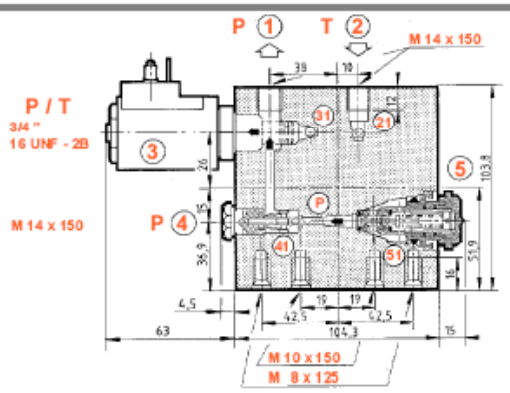
PROTECTION (linking excepted) : IP 44

CODE / CODE / KODE	VOLTAGE / TENSION / SPANNUNG	MOTOR REFERENCE / REFERENCE MOTEUR / MOTOR REFERENZ	NOMINAL POWER S3 10 % / PUISSANCE NOM. S3 10 % / NENNLEISTUNG S3 10 %	TERMINALS / BORNES / E. ANSCHLÜSSE	MASS of MOTOR / MASSE du MOTEUR / MASSE von MOTOR
FE1	12 V	109 519	0,175 kW	Connector Connecteur Stecker " PRONER " Ref. 841326	1,6 Kg
FE2	24 V	109 399	0,175 kW		

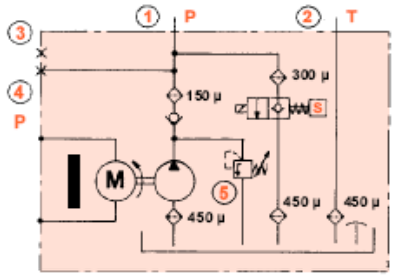
PUMP TYPE (Sign - Signe - Zeichen I - V)

MODEL / MODELE / TYP	Capacity c c / rev	Capacity cubic / inch	Capacité cm 3 / t	Capacité cubic / inch	Fördervolumen cm 3 / U	Fördervolumen cubic / inch
0025	0,25	0,01				
0050	0,50	0,03				
0075	0,75	0,04				
0100	1	0,06				
0125	1,25	0,07				
0150	1,50	0,09				
0200	2	0,12				

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see page 134)

CONNECTION : Bell housings - Couplings - Interfaces

ELECTRIC CONNECTION : Relay - Braid - Collars

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) - Méchanical Lowering Valve (VDM) Pressure Relief Valve (VLP) Flow Regulator - Hollow Screws Manual Decompressure Switch

VARIOUS ACCESSORIES : Cowling - Flange

MICRO POWER - PACKS DIRECT CURRENT

TYPE FE 12 V - 24 V 0,175 kW

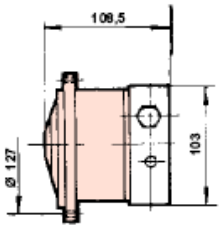
DIRECT CURRENT

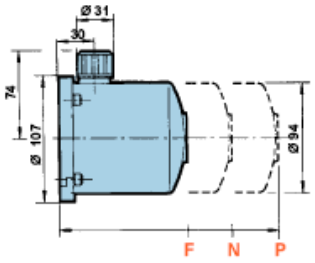
CODIFICATION

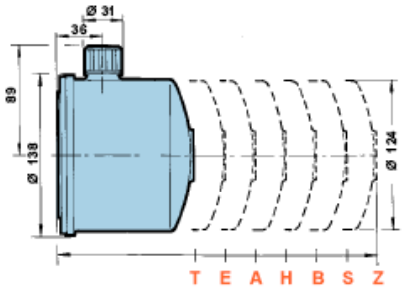
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	FE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

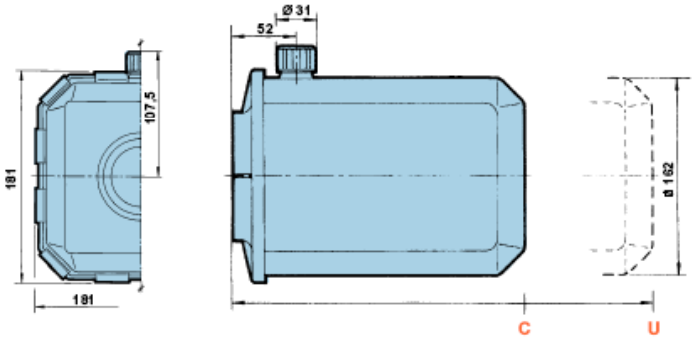
(F.T R 0026)

TYPE OF TANKS (Full capacity) (Sign - *Signe* - Zeichen VIII)









TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* LAGEN 1 - 3 - 4 - 5	POSITION *POSITION* LAGE 2	
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT		DIMENSIONS *DIMENSIONS* MASSE
▲ F	0,5 L	0,5 L		110
W	0,75 L	0,7 L	0,6 L	150
P	1 L	0,9 L	0,8 L	190
T	1,1 L	1,1 L	0,7 L	111
E	1,5 L	1,4 L	1 L	148
A	2 L	2 L	1,4 L	193,5
H	2,5 L	2,4 L	2 L	244
■ B	3 L		2,3 L	284,5
■ S	4 L		3,4 L	390
■ Z	6 L		5,3 L	606
C	5 L	4,7 L	3,8 L	242
■ U	6 L		5 L	297

■ In vertical position only

▲ in horizontal position only

MICRO POWER - PACKS DIRECT CURRENT TYPE FE 12 V - 24V 0,175 kW

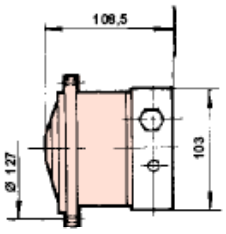
DIRECT CURRENT

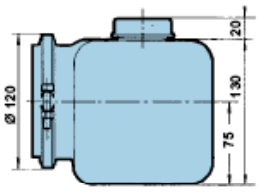
CODIFICATION

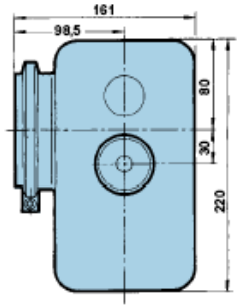
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	FE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

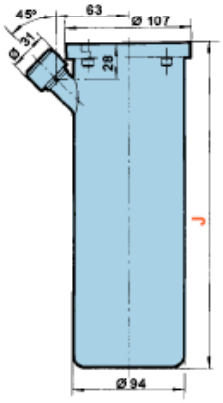
(F.T R 0026)

TYPE OF TANKS (Full capacity) (Sign - *Signe* - Zeichen VIII)









TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* LAGEN 1 - 3 - 4 - 5	POSITION *POSITION* LAGE 2	
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT		DIMENSIONS *DIMENSIONS* MASSE
■ J	1,7 L	1,1 L	1,28 L	280
▲ M	3,3 L	2,6 L		

■ In vertical position only

▲ in horizontal position only

MICRO POWER - PACKS DIRECT CURRENT TYPE FE 12 V - 24V 0,175 kW

DIRECT CURRENT

CODIFICATION

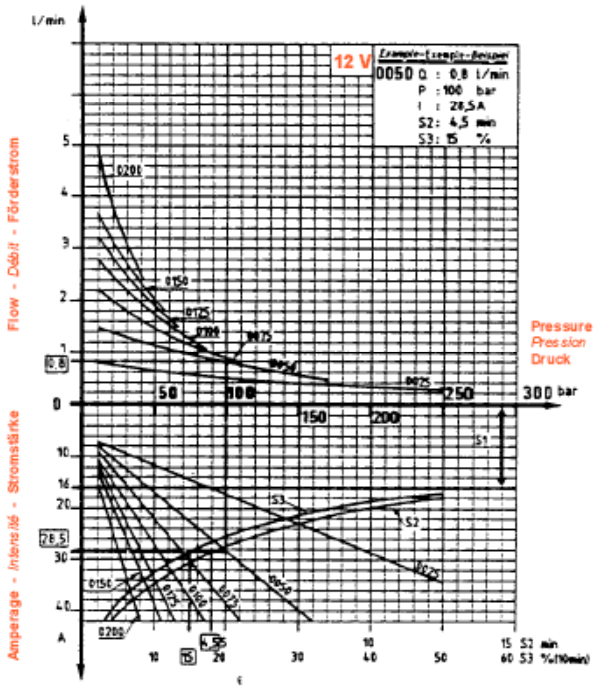
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	FE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

(F.T R 0026)

DIRECT CURRENT MOTOR NOMINAL POWER S3 (10 % of 10 min) 0,175 kW

Reference 109 519

Code FE 1

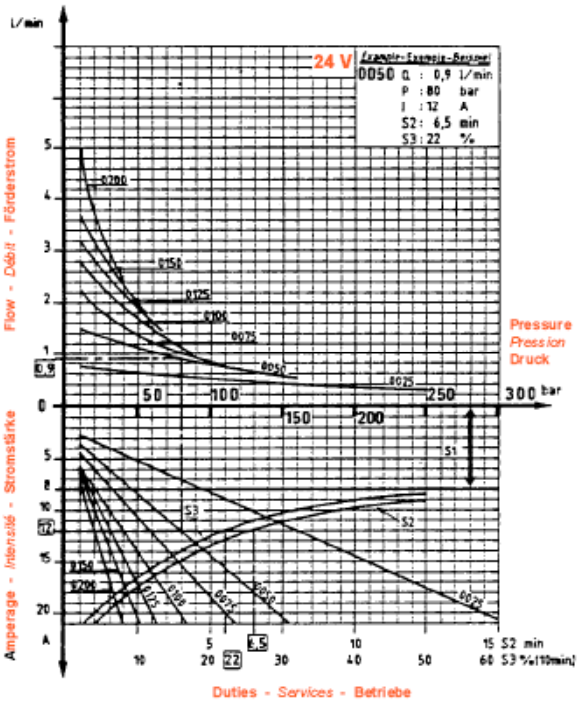


Duty Service Betrieb S1 up to jusqu'à bis 16 A

DIRECT CURRENT MOTOR NOMINAL POWER S3 (10 % of 10 min) 0,175 kW

Reference 109 399

Code FE 2



Duty Service Betrieb S1 up to jusqu'à bis 8 A

Flow variation in l/min , for a supplied tension (U) of 1 V variation .

$$\Delta Q = 0{,}26 \times Q \times \frac{\Delta U}{U}$$

l / min cm3 / t Volt

EXAMPLE

Pump : 0,5 cc / rev Voltage : 12 V

$$\Delta Q = Q\,n.al \times \frac{\Delta U}{U} \times Q$$

$$\Delta Q = 0{,}26 \times \frac{1}{12} \times 0{,}5 = \boxed{0{,}010}$$

TYPE TYPE TYP	Flow Débit l/min Förderstrom 12 V	24 V
0025	0,065	0,033
0050	0,13	0,065
0075	0,195	0,098
0100	0,26	0,13
0125	0,325	0,163
0150	0,39	0,195
0200	0,50	0,25

S1 : Continuous Duty
S2 : Temporary Duty (min)
S3 : Periodical Intermittent Duty (10% of 10 min)
ID : Starting Amperage 12 V : 100 Amp.
24 V : 60 Amp.

Curves drawn with a constant tension : Oil SHELL Tellus T46
Viscosity 46 cSt (±10%) at 40 °C

Test temperature : Oil 40 °C
Ambient 20 °C

Characteristics given as an indication

Reading example

ELECTRO - HYDRAULIC CHARACTERISTICS

MOTOR TYPE FE 12 - 24 V 0,175 kW

DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	FE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

(F.T R 0026)

DIRECT CURRENT ELECTRIC MOTOR
with permanents magnets

References :	II Signe	III Signe
12 V : 109 519	FE	1
24 V : 109 399	FE	2

NOMINAL POWER DUTY S3
12 and 24 V : 0,175 kW

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MINI POWER PACKS

MOTOR FE 12 V : 0,175 kW
24 V : 0,175 kW

Q
Flow in l / min
Débit en l / min
Fördermenge in l / min

I
Amperage
Intensité en Ampères
Stromstärke in Ampere

S1 Permanent *Permanent* Dauerbetrieb

S2 min

S3 % (10 min)

PUMPS *POMPES* PUMPEN		12 V PRESSURE - *PRESSION* - DRUCK								24 V PRESSURE - *PRESSION* - DRUCK							
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI
0025	Q	0,8	0,65	0,55	0,5	0,4	0,35	0,3	0,2	0,8	0,65	0,55	0,5	0,4	0,35	0,3	0,2
	I	8,6	12	14	17	20	22	26	34	4,5	5,8	7	8,3	10	11	12,7	17
	S2	S1	S1	S1	S1	9,5	8	5,5	2,8	S1	S1	S1	S1	9,5	8	5,5	2,8
	S3					37	30	19	8					37	30	19	8
0050	Q	1,5	1,15	0,9	0,75	0,65	0,55	0,45		1,5	1,15	0,9	0,75	0,65	0,55	0,45	
	I	9	17	22	30	35	40	46		4,6	8,4	11	15	17,5	20	23	
	S2	S1	S1	8	4	2,5	1,5	0,15		S1	S1	8	4	2,5	1,5	0,15	
	S3			30	14	7,5	3					30	14		3		
0075	Q	2,35	1,4	1,15	0,85	0,7				2,35	1,4	1,15	0,85	0,7			
	I	9,4	22	30	40	50				4,7	11	15	20	25			
	S2	S1	8	4	1,5	0,05				S1	8	4	1,5	0,05			
	S3		30	14	3						30	14	3	3,9			
0100	Q	3	1,75	1,25	1					3	1,75	1,25	1				
	I	9,7	28	40	50					4,8	14	19,5	25				
	S2	S1	4,7	1,6	0,05					S1	4,7	1,6	0,05				
	S3		17	3,5							17	3,5					
0125	Q	3,5	1,9	1,3						3,5	1,9	1,3					
	I	10	34	48						4,9	16,5	23,5					
	S2	S1	3,2	0,1						S1	3,2	0,1					
	S3		10								10						
0150	Q	4	2							4	2						
	I	10,5	40							5,1	19,5						
	S2	S1	1,6							S1	1,6						
	S3		3,5								3,5						
0200	Q	5,5	2							5,5	2						
	I	12	50							6	25						
	S2	S1	0,05							S1	0,05						
	S3																

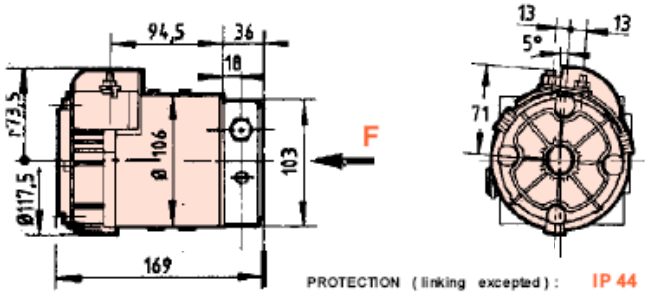
DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	KE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

(F.T R 0026)

MOTOR TYPE DIRECT CURRENT (Sign - Signe - Zeichen II - III - IV)



PROTECTION (linking excepted) : IP 44

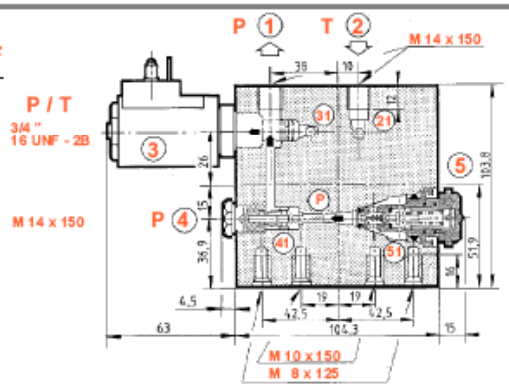
CODE / CODE / KODE	VOLTAGE / TENSION / SPANNUNG	MOTOR REFERENCE / REFERENCE MOTEUR / MOTOR REFERENZ	NOMINAL POWER S1 / PUISSANCE NOM. S1 / NENNLEISTUNG S1	TERMINALS / BORNES / E. ANSCHLÜSSE	MASS of MOTOR / MASSE du MOTEUR / MASSE von MOTOR
KE2	24 V	111 048	0,6 kW	⊕ M 6 x 100 ⊖ M 8 x 125	3,4 Kg
KE4	48 V	111 049	0,6 kW		

Motors with brush wear indicator (Damaged brush sets , contact with ⊖)

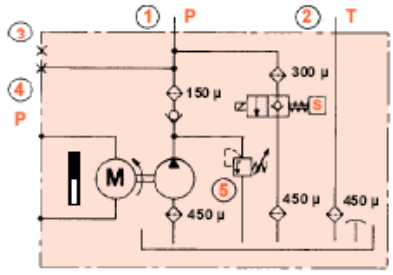
PUMP TYPE (Sign - Signe - Zeichen I - V)

MODEL / MODELE / TYP	Capacity c c / rev / Capacité cm 3 / t / Fördervolumen cm 3 / U	Capacity cubic / inch / Capacité cubic / inch / Fördervolumen cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2	0,12

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see page 134)

CONNECTION : Bell housings - Couplings - Interfaces

ELECTRIC CONNECTION : Relay - Braid - Collars

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION : Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) - Mechanical Lowering Valve (VDM) Pressure Relief Valve (VLP) Flow Regulator - Hollow Screws Manual Decompressure Switch

VARIOUS ACCESSORIES : Cowling - Flange

MICRO POWER - PACKS DIRECT CURRENT

TYPE KE 24 V : 0,6 kW / 48 V : 0,6 kW DUTY S1

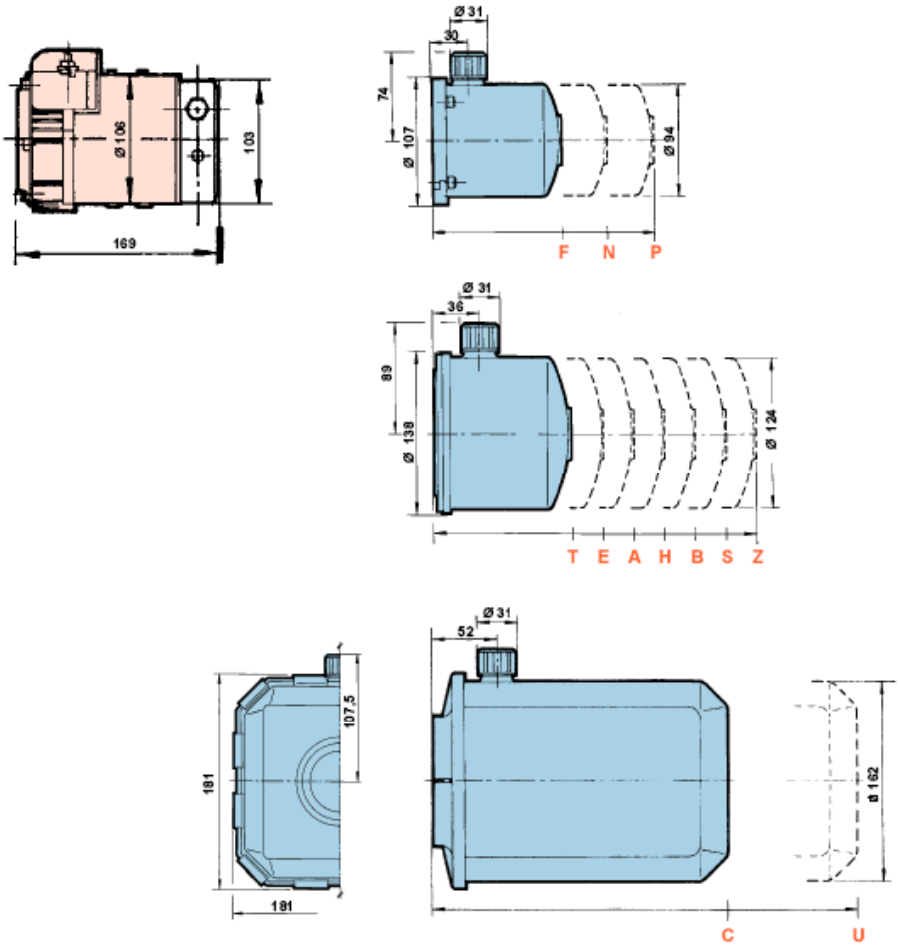
DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	KE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

(F.T R 0026)

TYPE OF TANKS (Full capacity) (Sign - Signe - Zeichen VIII)



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* LAGEN 1 - 3 - 4 - 5	POSITION *POSITION* LAGE 2	
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT		DIMENSIONS *DIMENSIONS* MASSE
▲ F	0,5 L	0,5 L		110
W	0,75 L	0,7 L	0,6 L	150
P	1 L	0,9 L	0,8 L	190
T	1,1 L	1,1 L	0,7 L	111
E	1,5 L	1,4 L	1 L	148
A	2 L	2 L	1,4 L	193,5
H	2,5 L	2,4 L	2 L	244
■ B	3 L		2,3 L	284,5
■ S	4 L		3,4 L	390
■ Z	6 L		5,3 L	606
C	5 L	4,7 L	3,8 L	242
■ U	6 L		5 L	297

■ In vertical position only

▲ in horizontal position only

MICRO POWER - PACKS DIRECT CURRENT TYPE KE 24 V : 0,6 kW 48 V : 0,6 kW DUTY S1

DIRECT CURRENT

CODIFICATION

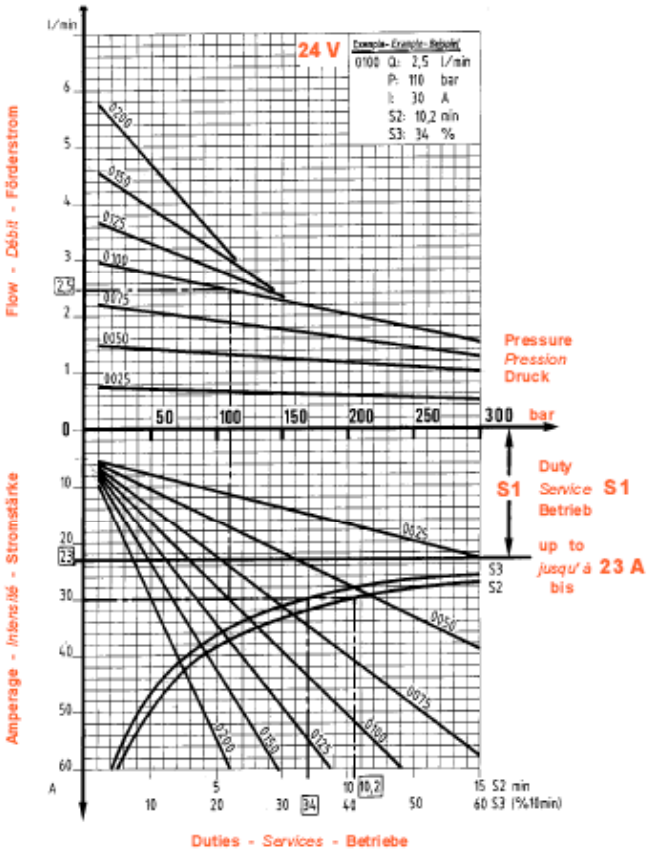
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	KE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

(F.T R 0026)

DIRECT CURRENT MOTOR NOMINAL POWER S1 0,6 kW — **Reference** 111 048

Code **KE | 2**

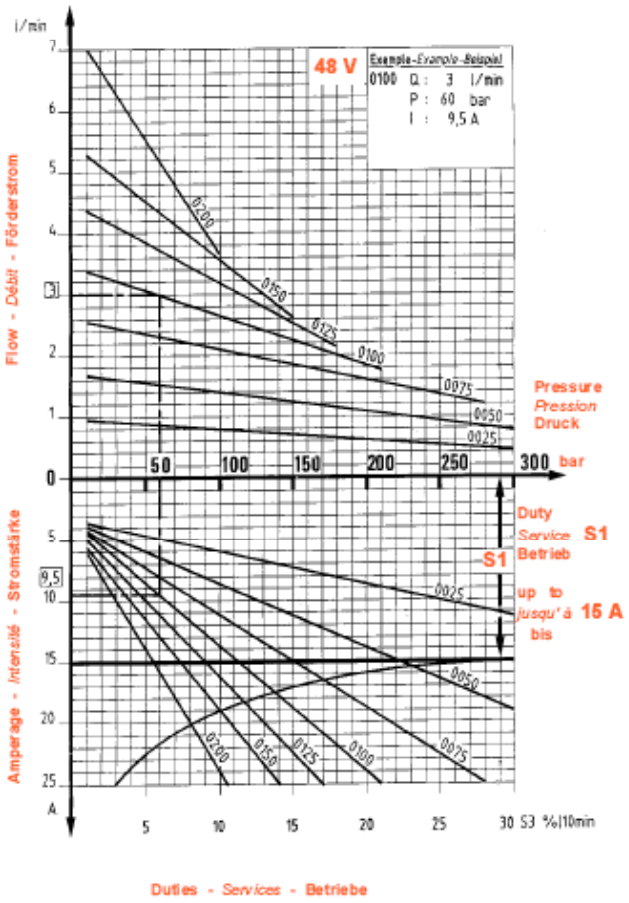
II	III
Sign Signe Zeichen	Sign Signe Zeichen



DIRECT CURRENT MOTOR NOMINAL POWER S1 0,6 kW — **Reference** 111 049

Code **KE | 4**

II	III
Sign Signe Zeichen	Sign Signe Zeichen



S1 : Continuous Duty
S2 : Temporary Duty (min)
S3 : Periodical Intermittent Duty (10% of 10 min)

ID : Starting Amperage 24 V : 460 Amp.
48 V : 380 Amp.

Curves drawn with
a constant tension : Oil SHELL Tellus T46
Viscosity 46 cSt (± 10%) at 40 °C

Test temperature : Oil 40 °C
Ambient 20 °C

Characteristics given as an indication

Reading example

ELECTRO - HYDRAULIC CHARACTERISTICS

MOTOR TYPE KE — 24 V : 0,6 kW / 48 V : 0,6 kW — **DUTY** S1

DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	KE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

(F.T R 0026)

DIRECT CURRENT ELECTRIC MOTOR with permanents magnets with brush wear indicator

References :	II Signe	III Signe
24 V : 111 048	KE	2
48 V : 111 049	KE	4

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MINI POWER PACKS

MOTOR KE 24 V : 0,6 kW 48 V : 0,6 kW

DUTY S1

PUMPS POMPES PUMPEN		24 V PRESSURE - PRESSION - DRUCK								48 V PRESSURE - PRESSION - DRUCK							
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI
0025	Q	0,8	0,75	0,7	0,65	0,6	0,55	0,5	0,45	1	0,95	0,8	0,7	0,65	0,6	0,55	0,5
	I	7,5	10	13	15,5	17	18	19,5	21	3,4	4,7	6	7,3	8	8,7	9,2	10
	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
0050	Q	1,7	1,55	1,4	1,2	1,15	1,1	1	0,9	1,7	1,55	1,4	1,25	1,15	1,1	1	0,9
	I	7,7	12,5	18	23	25,5	28,5	31	34	3,6	6	8,6	11,2	12,5	14	15	16,5
	S1	S1	S1	S1	S1	S1				S1	S1	S1	S1	S1	S1	S1	
0075	Q	2,5	2,3	2,05	1,8	1,7	1,6	1,5	1,45	2,6	2,35	2,1	1,85	1,7	1,6	1,5	1,35
	I	8	15	23	34	34	38	42	45,5	3,8	7,3	11,2	15	17	19	20,8	22,6
	S1	S1	S1	S1	S1					S1	S1	S1	S1				
0100	Q	3,35	3	2,65	2,25	2	1,85			3,4	3,1	2,65	2,25	2,05	1,8		
	I	8,5	18	28	38	42,5	48			4	8,6	13,8	19	20,5	24		
	S1	S1	S1	S1						S1	S1	S1					
0125	Q	4,3	3,75	3,1	2,55	2,2				4,5	3,8	3,2	2,5	2,2			
	I	8,8	20	38	43	49				4,2	10	16,2	22,5	25			
	S1	S1	S1							S1	S1						
0150	Q	5,5	4,5	3,5						5,4	4,5	3,55					
	I	9	23,5	39						5	11,8	19					
	S1	S1	S1							S1	S1						
0200	Q	7	5,5	3,8						7,2	5,5	3,6					
	I	10,5	28	58						5	14	24					
	S1	S1	S1							S1	S1						

Q — Flow in l / min *Débit en l / min* Fördermenge in l / min

I — Amperage *Intensité en Ampères* Stromstärke in Ampere

S1 — Permanent *Permanent* Dauerbetrieb

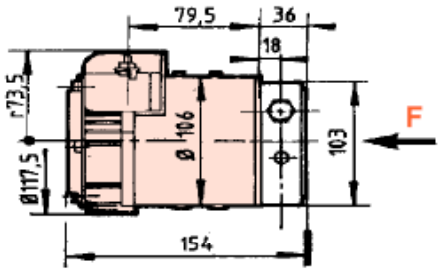
DIRECT CURRENT

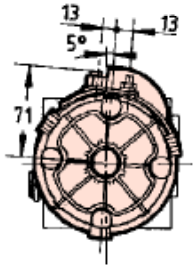
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	HE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

(F.T R 0026)

MOTOR TYPE DIRECT CURRENT (Sign - Signe - Zeichen II - III - IV)





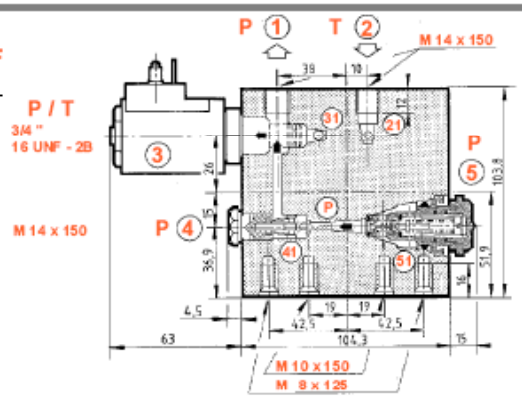
PROTECTION (linking excepted) : IP 44

CODE / CODE / KODE	VOLTAGE / TENSION / SPANNUNG	MOTOR REFERENCE / REFERENCE MOTEUR / MOTOR REFERENZ	NOMINAL POWER S3 10 % / PUISSANCE NOM. S3 10% / NENNLEISTUNG S3 10 %	TERMINALS / BORNES / E. ANSCHLÜSSE	MASS of MOTOR / MASSE du MOTEUR / MASSE von MOTOR
HE1	12 V	109 510	0,8 kW	⊕ M 6 x 100 ⊖ M 8 x 125	3,25 Kg
HE2	24 V	109 500	1 kW		

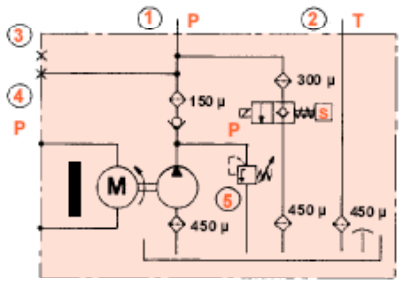
PUMP TYPE (Sign - Signe - Zeichen I - V)

MODEL / MODELE / TYP	Capacity / Capacité / Fördervolumen	
	c c / rev / cm 3 / t / cm 3 / U	cubic / inch / cubic / inch / cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2	0,12

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see page 134)

CONNECTION : Bell housings - Couplings - Interfaces

ELECTRIC CONNECTION : Relay - Braid - Collars

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) - Mechanical Lowering Valve (VDM) Pressure Relief Valve (VLP) Flow Regulator - Hollow Screws Manual Decompressure Switch

VARIOUS ACCESSORIES : Cowling - Flange

MICRO POWER - PACKS DIRECT CURRENT

TYPE HE 12 V : 0,8 kW
24 V : 1 kW

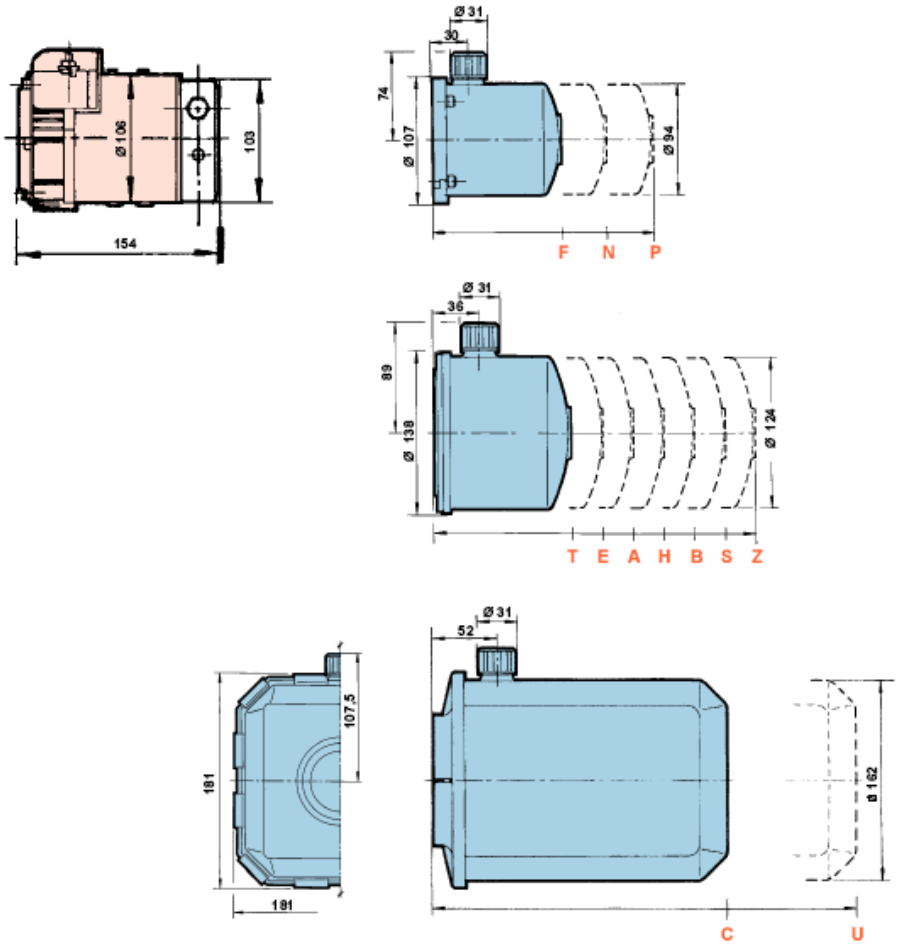
DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	HE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

(F.T R 0026)

TYPE OF TANKS (Full capacity) (Sign - *Signe* - Zeichen VIII)



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* LAGEN 1 - 3 - 4 - 5	POSITION *POSITION* LAGE 2	
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT		DIMENSIONS *DIMENSIONS* MASSE
▲ F	0,5 L	0,5 L		110
W	0,75 L	0,7 L	0,6 L	150
P	1 L	0,9 L	0,8 L	190
T	1,1 L	1,1 L	0,7 L	111
E	1,5 L	1,4 L	1 L	148
A	2 L	2 L	1,4 L	193,5
H	2,5 L	2,4 L	2 L	244
■ B	3 L		2,3 L	284,5
■ S	4 L		3,4 L	390
■ Z	6 L		5,3 L	606
C	5 L	4,7 L	3,8 L	242
■ U	6 L		5 L	297

■ In vertical position only

▲ in horizontal position only

MICRO POWER - PACKS DIRECT CURRENT TYPE HE 12 V: 0,8 kW 24 V: 1 kW

DIRECT CURRENT

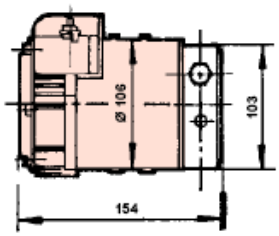
CODIFICATION

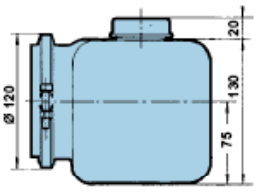
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	HE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

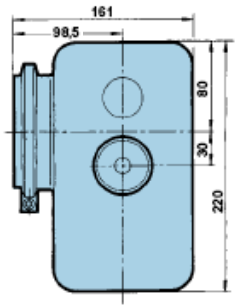
(F.T R 0026)

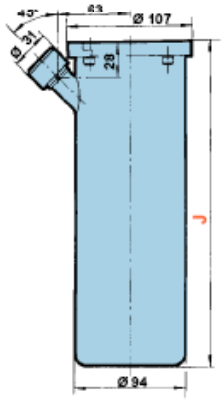
TYPE OF TANKS (Full capacity)

(Sign - *Signe* - Zeichen VIII)









TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* LAGEN 1 - 3 - 4 - 5	POSITION *POSITION* LAGE 2	
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT		DIMENSIONS *DIMENSIONS* MASSE
■ J	1,7 L	1,1 L	1,28 L	280
▲ M	3,3 L	2,6 L		

■ In vertical position only

▲ in horizontal position only

MICRO POWER - PACKS DIRECT CURRENT TYPE HE 12 V : 0,8 kW 24 V : 1 kW

DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	HE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

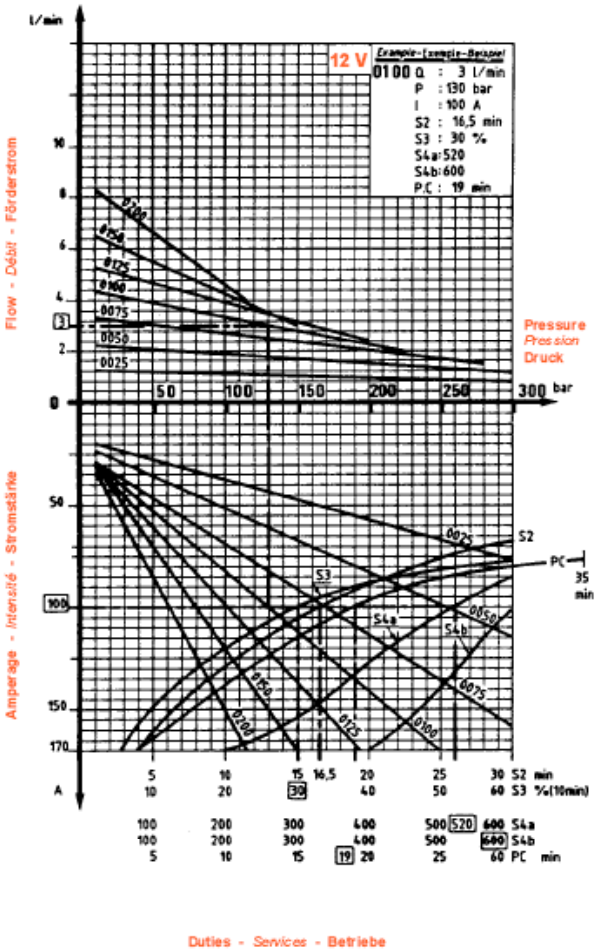
(F.T R 0026)

DIRECT CURRENT MOTOR 0,8 kW
NOMINAL POWER
S3 (10 % of 10 min)

Reference 109 510

Code HE 1

II	III
Sign Signe Zeichen	Sign Signe Zeichen

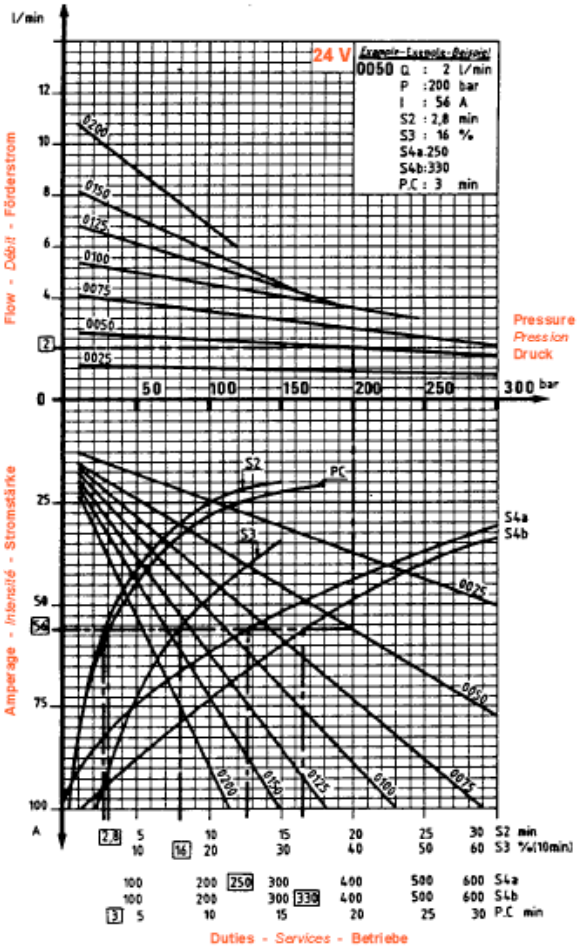


DIRECT CURRENT MOTOR 1 kW
NOMINAL POWER
S3 (10 % of 10 min)

Reference 109 500

Code HE 2

II	III
Sign Signe Zeichen	Sign Signe Zeichen



S1 : Continuous Duty
S2 : Temporary Duty (min)
S3 : Periodical Intermittent Duty (10% of 10 min)
S4a - S4b : Intermittent Starting Duty

P C : Critical Moment (min)
I D : Starting Amperage 12 V : 300 Amp.
24 V : 320 Amp.

Curves drawn with
a constant tension : Oil SHELL Tellus T46
Viscosity 46 cSt (± 10%) at 40 °C

Test temperature : Oil 40 °C
Ambient 20 °C

Characteristics given as an indication

Reading example

ELECTRO - HYDRAULIC CHARACTERISTICS

MOTOR TYPE HE 12 V : 0,8 kW
24 V : 1 kW

DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	HE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

(F.T R 0026)

DIRECT CURRENT ELECTRIC MOTOR
with permanents magnets

References :	II Signe	III Signe
12 V: 109 510	HE	1
24 V: 109 500	HE	2

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MICRO POWER PACKS

MOTOR HE 12 V : 0,8 kW
24 V : 1 kW

PUMPS *POMPES* PUMPEN		12 V PRESSURE - *PRESSION* - DRUCK								24 V PRESSURE - *PRESSION* - DRUCK							
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI
0025	Q	1,2	1,1	1	0,98	0,95	0,9	0,85	0,8	1,65	1,3	1,15	1,1	1,08	1,05	1	1
	I	18	28	38	48	54	60	64	70	12	18	25	31	34	37,5	40	43
	S2	30	30	30	30	30	30	30	30	15	15	10,5	7,8	6,7	6,2	5,4	4,8
	S3	60	60	60	60	60	60	60	54	30	30	30	30	30	28	25,5	23
	S4a	600	600	600	600	600	600	600	600	600	600	600	600	550	480	450	410
	S4b	600	600	600	600	600	600	600	600	600	600	600	600	600	540	490	450
	PC	35	35	35	35	35	35	35	35	18	18	13	9	7,7	6,7	6	5,4
0050	Q	2,3	2,05	1,9	1,7	1,6	1,5	1,4	1,3	2,6	2,45	2,3	2,15	2,05	2	1,9	1,85
	I	22	37	54	70	77	85	94	100	13	23,5	35	45	50	56	61	66,5
	S2	30	30	30	30	25,5	22	19	16,5	15	11	6,7	4,5	3,5	2,8	2,4	2
	S3	60	60	60	60	60	46	36	30	30	30	30	22	19	16	13,5	11,5
	S4a	600	600	600	600	600	600	560	520	600	600	540	390	315	230	205	160
	S4b	600	600	600	600	600	600	600	600	600	600	580	435	380	330	290	250
	PC	35	35	35	35	35	26,5	22	19	18	13	7,4	5	4	3,5	2,7	2,2
0075	Q	3,3	2,9	2,6	2,3	2,1	2	1,8	1,6	4,15	3,8	3,45	3,1	2,95	2,75	2,6	2,4
	I	25	46	69	91	102	114	125	136	14,5	28	42,5	58	65	73	80	88
	S2	30	30	29	19	15,7	13	10,8	8,6	15	8,7	4,8	2,7	2	1,4	1,2	0,8
	S3	60	60	60	36	28	23	18	14	30	30	23,5	15	12	10	7,2	6,8
	S4a	600	600	600	560	510	450	410	370	600	580	410	235	170	110	65	30
	S4b	600	600	600	600	600	565	535	510	600	600	450	315	255	200	150	115
	PC	35	35	35	22	18,2	15,4	12,5	10,5	18	8,2	5,3	3	2,2	1,5	1,15	0,9
0100	Q	4,3	3,9	3,4	2,85	2,6	2,3	2		5,5	5	4,55	4,1	3,85	3,6	3,35	
	I	26	53	87	112	126	149	156		15	32	50	70	78,5	88	97	
	S2	30	30	22,5	13,6	10,5	7,7	5,6		15	7,2	3,5	1,7	1,2	0,7	0,6	
	S3	60	60	50	23,5	17	12	8		30	30	18	10,4	8,5	6,5	5	
	S4a	600	600	600	460	405	355	290		600	580	300	130	75	28	5	
	S4b	600	600	600	570	535	500	450		600	600	370	220	160	95	35	
	PC	35	35	26	15,6	12,5	8,6	6,4		18	8,2	4	1,8	1,3	0,9	0,8	
0125	Q	5,4	4,7	3,9	3,15	2,7				6,9	6,15	5,3	4,45	4			
	I	26,5	62	100	138	157				15,5	37	61	85	96			
	S2	30	30	16,5	8,5	5,5				15	5,8	2,5	0,8	0,7			
	S3	60	60	30	13,2	8				30	27	13,5	7,2	5,5			
	S4a	600	600	520	370	290				600	480	200	40	5			
	S4b	600	600	600	510	450				600	515	280	120	50			
	PC	35	35	19	10	6,5				18	6,5	2,7	1	0,9			
0150	Q	6,68	5,6	4,35	3					8,3	7,2	5,9	4,65				
	I	27	70	118	170					16,5	42	72	100				
	S2	30	28,5	11,8	4					15	2,7	1,6	0,5				
	S3	60	60	20	5,5					30	23	10,4	4,5				
	S4a	600	600	430	200					600	400	115	5				
	S4b	600	600	550	400					600	450	205	30				
	PC	35	35	14	4					18	5,2	1,7	0,6				
0200	Q	8,6	6,6	4,55						11	9	6,85					
	I	28	85	150						17,5	52	91					
	S2	30	21,5	6,5						15	3,4	0,7					
	S3	60	44	9,5						30	17,5	6,5					
	S4a	600	600	320						600	295	20					
	S4b	600	600	470						600	360	90					
	PC	35	25	7,6						18	3,7	0,9					

Q Flow in l / min
Débit en l / min
Fördermenge in l / min

I Amperage
Intensité en Ampères
Stromstärke in Ampere

S1 Permanent
Permanent
Dauerbetrieb

S2 min

S3 % (10 min)

S4a
Number of start / hour
1 sec. work
5 sec.stop
Nb de démarrage /h
1 sec. travail
5 sec. arrêt
Anzahl der Anläufe / h
1 Sek. Arbeit
5 Sek. Stillstand

S4b
Number of start / hour
1 sec. work
1 sec. stop during 20 sec. Rest 40 sec.
Nb de démarrage /h
1 sec. travail
1 sec. arrêt pendant 20 sec.
Repos 40 sec.
Anzahl der Anläufe / h
1 Sek. Arbeit
1 Sek. Stillstand während 20 Sek. Ruhe 40 Sek.

PC
(min)
Continous working breaking point
(min)
Point critique en fonctionnement
Intermittu
(min)
Kritischer Punkt bei durchgehendem Betrieb

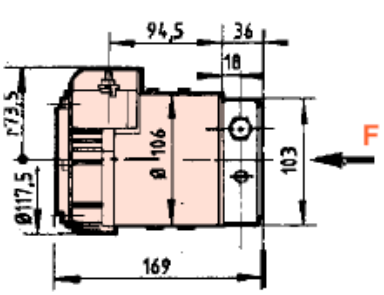
DIRECT CURRENT

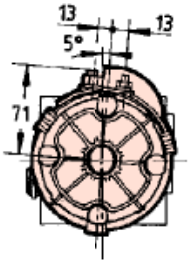
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	AE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

(F.T R 0026)

MOTOR TYPE DIRECT CURRENT (Sign - Signe - Zeichen II - III - IV)





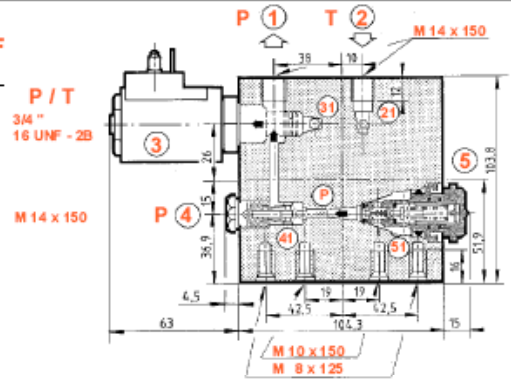
PROTECTION (linking excepted) : IP 44

CODE / CODE / KODE	VOLTAGE / TENSION / SPANNUNG	MOTOR REFERENCE / REFERENCE MOTEUR / MOTOR REFERENZ	NOMINAL POWER S3 10 % / PUISSANCE NOM. S3 10 % / NENNLEISTUNG S3 10 %	TERMINALS / BORNES / E. ANSCHLÜSSE	MASS of MOTOR / MASSE du MOTEUR / MASSE von MOTOR
AE1	12 V	109 511	1,1 kW	⊕ M 6 x 100 ⊖ M 8 x 125	3,4 Kg
AE2	24 V	109 512	1,2 kW		

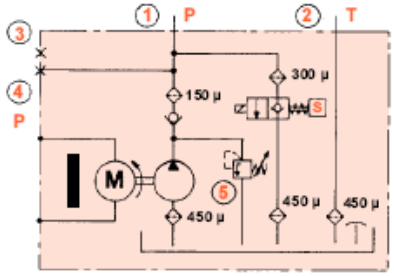
PUMP TYPE (Sign - Signe - Zeichen I - V)

MODEL / MODELE / TYP	Capacity / Capacité / Fördervolumen	
	c c / rev / cm 3 / U	cubic / inch / cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2	0,12

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see page 134)

CONNECTION : Bell housings - Couplings - Interfaces

ELECTRIC CONNECTION : Relay - Braid - Collars

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) - Mechanical Lowering Valve (VDM) Pressure Relief Valve (VLP) Flow Regulator - Hollow Screws Manual Decompressure Switch

VARIOUS ACCESSORIES : Cowling - Flange

MICRO POWER - PACKS DIRECT CURRENT

TYPE AE 12 V : 1,1 kW
24 V : 1,2 kW

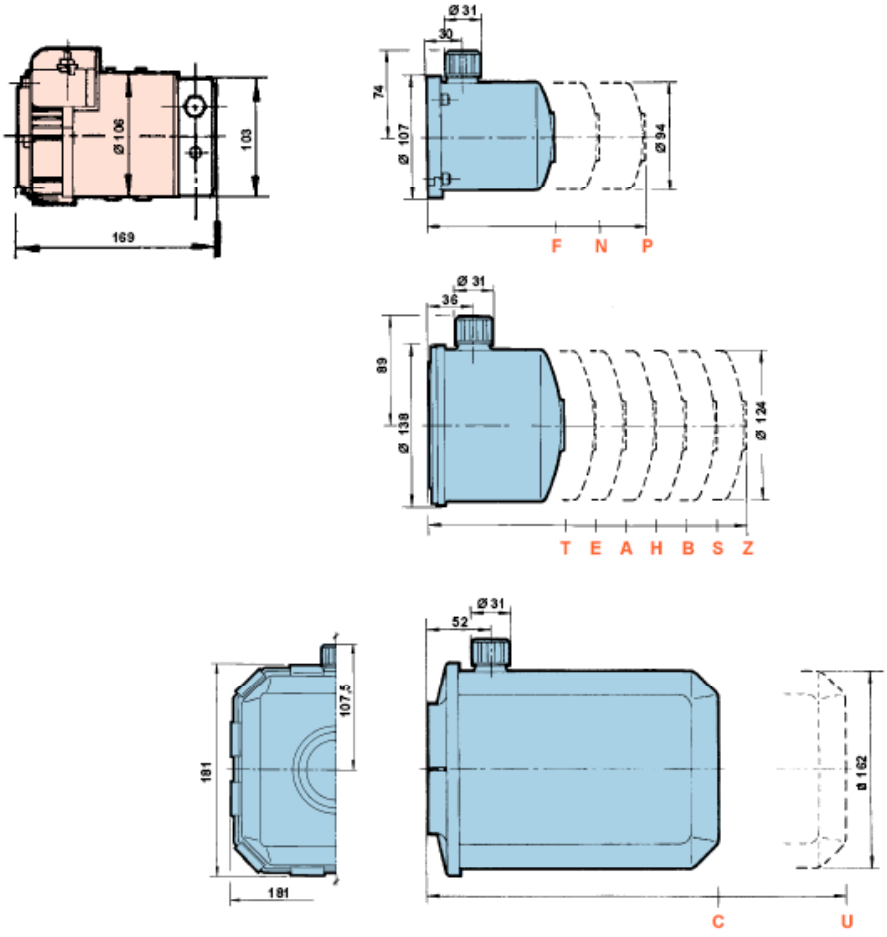
DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	AE	Sign *Signe* Zeichen	C	Sign *Signe* Zeichen	T			Sign *Signe* Zeichen	Sign *Signe* Zeichen				

(F.T R 0026)

TYPE OF TANKS (Full capacity) (Sign - *Signe* - Zeichen VIII)



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* LAGEN 1 - 3 - 4 - 5	POSITION *POSITION* LAGE 2	
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT		DIMENSIONS *DIMENSIONS* MASSE
▲ F	0,5 L	0,5 L		110
W	0,75 L	0,7 L	0,6 L	150
P	1 L	0,9 L	0,8 L	190
T	1,1 L	1,1 L	0,7 L	111
E	1,5 L	1,4 L	1 L	148
A	2 L	2 L	1,4 L	193,5
H	2,5 L	2,4 L	2 L	244
■ B	3 L		2,3 L	284,5
■ S	4 L		3,4 L	390
■ Z	6 L		5,3 L	606
C	5 L	4,7 L	3,8 L	242
■ U	6 L		5 L	297

■ In vertical position only

▲ in horizontal position only

MICRO POWER - PACKS DIRECT CURRENT TYPE AE 12 V: 1,1 kW 24 V: 1,2 kW

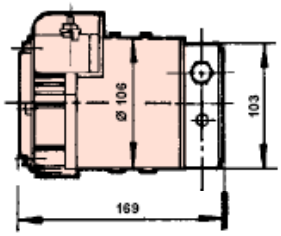
DIRECT CURRENT

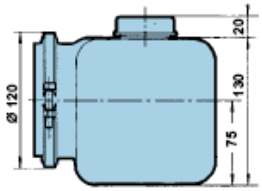
CODIFICATION

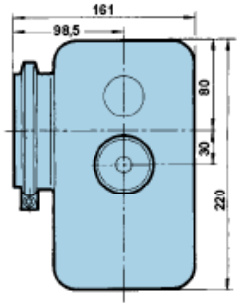
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	AE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

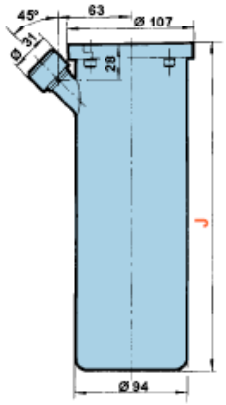
(F.T R 0026)

TYPE OF TANKS (Full capacity) (Sign - Signe - Zeichen VIII)









TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* LAGEN 1 - 3 - 4 - 5	POSITION *POSITION* LAGE 2	
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT		DIMENSIONS *DIMENSIONS* MASSE
■ J	1,7 L	1,1 L	1,28 L	280
▲ M	3,3 L	2,6 L		

■ In vertical position only

▲ in horizontal position only

MICRO POWER - PACKS DIRECT CURRENT TYPE AE 12 V : 1,1 kW 24 V : 1,2 kW

DIRECT CURRENT

CODIFICATION

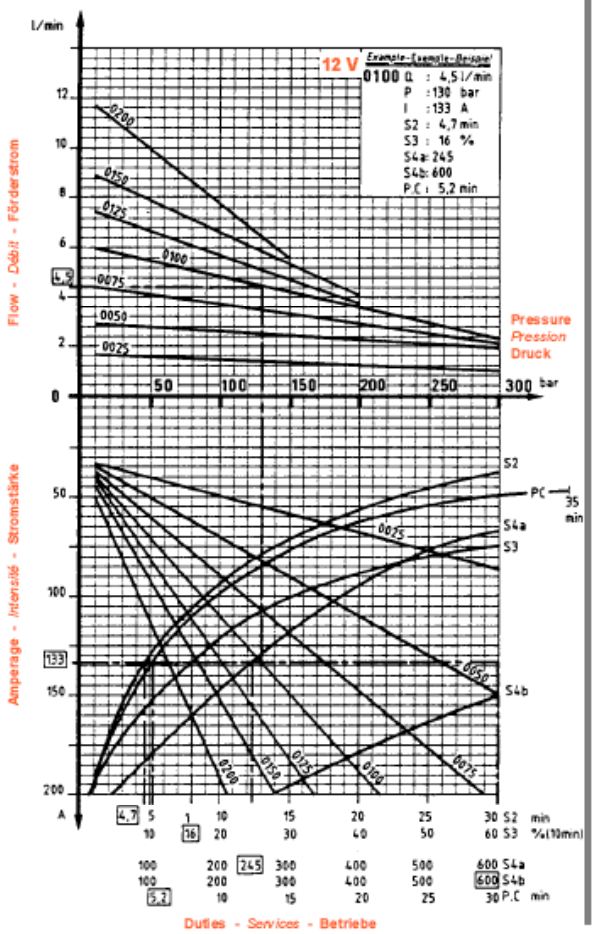
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	AE	Sign Signe Zeichen	C	Sign Signe Zeichen	T								

(F.T R 0026)

DIRECT CURRENT MOTOR 1,1 kW
NOMINAL POWER
S3 (10 % of 10 min)

Reference 109 511

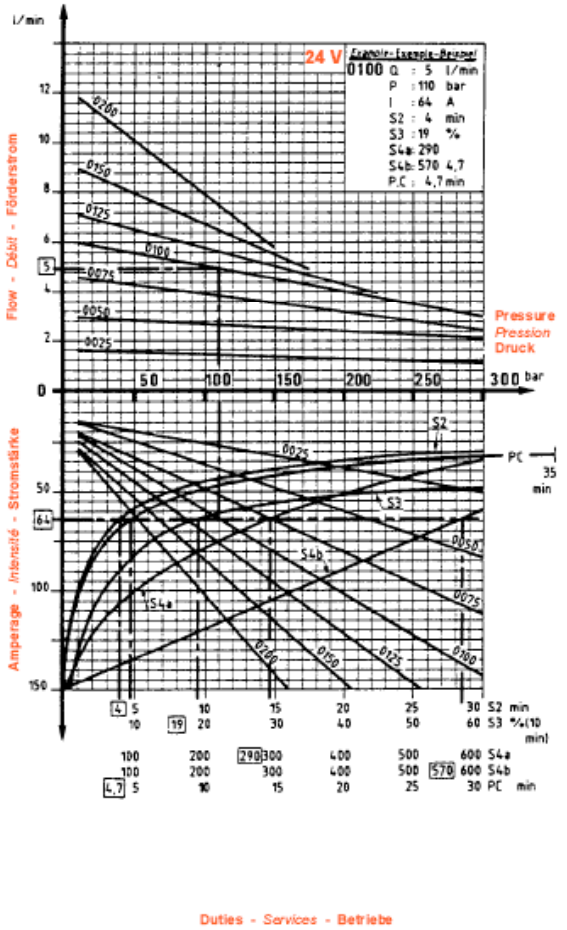
Code AE | 1



DIRECT CURRENT MOTOR 1,2 kW
NOMINAL POWER
S3 (10 % of 10 min)

Reference 109 512

Code AE | 2



S1 : Continuous Duty
S2 : Temporary Duty (min)
S3 : Periodical Intermittent Duty (10% of 10 min)
S4a - S4b : Intermittent Starting Duty

P C : Critical Moment (min)
I D : Starting Amperage 12 V : 460 Amp.
24 V : 380 Amp.

Curves drawn with
a constant tension : Oil SHELL Tellus T46
Viscosity 46 cSt (±10%) at 40 °C

Test temperature : Oil 40 °C
Ambient 20 °C

Characteristics given as an indication

Reading example

ELECTRO - HYDRAULIC CHARACTERISTICS

MOTOR TYPE AE

12 V : 1,1 kW
24 V : 1,2 kW

DIRECT CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	AE	Sign Signe Zeichen	C	Sign Signe Zeichen	T			Sign Signe Zeichen	Sign Signe Zeichen				

(F.T R 0026)

DIRECT CURRENT ELECTRIC MOTOR with permanents magnets

References :	II Signe	III Signe
12 V : 109 511	AE	1
24 V : 109 512	AE	2

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MICRO POWER PACKS

MOTOR AE — 12 V : 1,1 kW / 24 V : 1,2 kW

Q — Flow in l / min — *Débit en l / min* — Fördermenge in l / min

I — Amperage — *Intensité en Ampères* — Stromstärke in Ampere

S1 Permanent — *Permanent* — Dauerbetrieb

S2 min

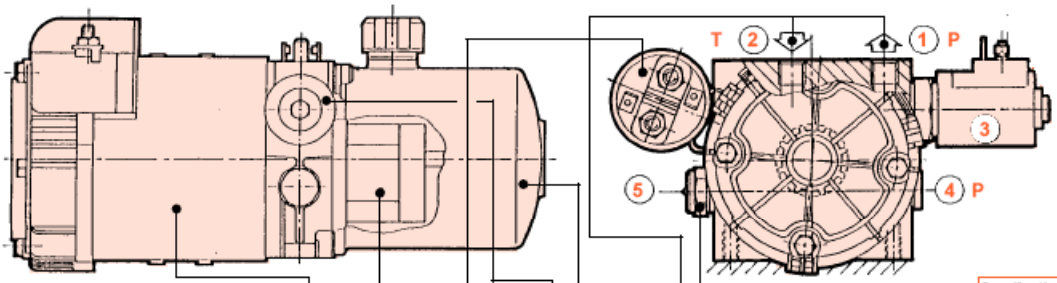
S3 % (10 min)

PUMPS *POMPES* PUMPEN		12 V PRESSURE - *PRESSION* - DRUCK								24 V PRESSURE - *PRESSION* - DRUCK							
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI
0025	Q	1,7	1,6	1,4	1,35	1,3	1,25	1,2	1,15	1,6	1,5	1,4	1,35	1,33	1,3	1,25	1,2
	I	30	40	48	58	64	68	73	77	14	19	26	32	35	38	41	44
	S2	30	28,5	24	21,5	20	15,5	14	13	30	30	30	23	19	15,5	11,5	10,5
	S3	60	60	60	60	60	60	60	54	30	30	30	30	60	60	60	60
	S4a	600	600	600	600	600	600	530	490	600	600	600	600	600	550	510	470
	S4b	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
	PC	35	35	30	22	20	18	16,5	15	35	35	35	29	22	18	14,5	12,5
0050	Q	4,5	4,15	3,7	3,4	3,2	3	2,8	2,6	3	2,9	2,7	2,55	2,48	2,36	2,28	2,2
	I	33	60	90	118	133	148	162	176	16	25	37	49	55	60	65	70
	S2	30	24	15	10,5	9	7,5	6,5	5	30	30	17	8,5	6,5	4,8	3,7	2,8
	S3	60	60	60	39	31	25	20,5	17	60	60	60	60	35	26	17	14
	S4a	600	600	560	420	375	330	290	260	600	600	570	430	390	330	280	240
	S4b	600	600	600	600	600	600	600	600	600	600	600	600	600	600	560	520
	PC	35	29	17	12	9,5	8	6,9	5,5	35	35	20,5	10,2	7,6	5,7	4,5	3,5
0075	Q	4,5	4,15	3,7	3,4	3,2	3	2,8	2,6	4,6	4,25	3,8	3,45	3,3	3,1	3	2,8
	I	33	60	90	118	133	148	162	176	18	32	48	64	72	80	88	96
	S2	30	19	11	6,3	4,7	3,5	2,5	1,7	30	22	8	4	2,8	2	1,5	1
	S3	60	60	39	21	16	11,5	8	5	60	60	54	18	13,5	10,5	8	6,2
	S4a	600	600	420	300	230	200	160	115	600	600	420	290	230	190	150	115
	S4b	600	600	600	600	600	600	510	410	600	600	600	560	510	460	410	350
	PC	35	21,7	12	7	5,2	4	2,7	1,9	35	26	10	4,5	3,2	2,4	1,7	1,2
0100	Q	6	5,6	4,8	4,2	3,8	3,55	3,2		6,1	5,65	5,1	4,5	4,25	3,9	3,8	3,5
	I	34	70	110	148	165	185	205		20	38	60	80	90	100	110	120
	S2	30	15	7,5	3,5	2,2	1,5	0,5		30	15	4,8	2	1,2	0,8	0,5	0,3
	S3	60	60	25	11,5	7	3,5	1		60	60	24	10,5	7,5	5,8	4	2,7
	S4a	600	600	335	200	140	80			600	540	330	190	135	95	60	40
	S4b	600	600	600	600	460	340			600	600	600	460	390	320	250	180
	PC	35	17,1	8	3,8	2,4	1,7			35	17	5,8	2,5	1,5	1,2	0,5	0,35
0125	Q	7,6	6,8	5,6	4,7	4,2				7,6	6,6	5,8	5	4,7	4,3	3,8	
	I	35	82	133	183	208				22	46	72	96	108	120	132	
	S2	29	12,5	4,7	1,5	0,5				30	10	2,7	1	0,5	0,3	0,2	
	S3	60	48	16	3,5	1				60	60	14	6,5	4,2	3	1,5	
	S4a	600	470	255	100					600	460	250	115	75	40	20	
	S4b	600	600	600	380					600	600	520	350	275	180	100	
	PC	32,6	14,2	5,3	1,7					35	8	3,5	1,2	0,6	0,35	0,25	
0150	Q	9,1	7,9	6,6	5,3					9,1	7,9	6,7	5,5	4,9			
	I	39	92	152	212					24	52	84	114	130			
	S2	28	10	3,2	0,5					30	6,5	1,7	0,3	0,1			
	S3	60	36	9,7	0,5					60	36	9	3,2	1,8			
	S4a	600	410	190						600	380	170	55	25			
	S4b	600	600	590						600	600	435	230	120			
	PC	32,6	11,2	3,5						35	8	2,1	0,35	0,25			
0200	Q	12	9,9	7,7						12,1	10	7,8	5,8				
	I	40	112	190						28	62	100	140				
	S2	28	7	1,2						30	4,2	0,7	0,2				
	S3	60	23,5	3						60	20	6,5	1,3				
	S4a	600	320	75						600	290	20	10				
	S4b	600	600	330						600	570	90	40				
	PC	35	35	35						35	5	0,9	0,25				

Charts drawn with a constant tension

Oil SHELL Tellus T 46
Viscosity 46 cSt (± 10 %) at 40 °C
Test temperature : Oil 40 °C
Ambient 20 °C

DIRECT CURRENT



Specify the required setting full flow of by-pass

0	1	AE	2	C	150	T	R	14	H	1	20	X	2	N	130
I Sign	II Sign	III Sign	IV Sign	V Sign	VI	VII Sign	VIII Sign	IX	X Sign	XI Sign	XII Sign	XIII Sign	XIV Sign		

PUMP TYPE
Series 0

GENERATION 1

MOTOR TYPE

	12 Volts	24 Volts	
Direct current (Duty S3 10 % of 10 min)	0,175 kW	0,175 kW	FE
	0,8 kW	1 kW	HE
	1,1 kW	1,2 kW	AE
Direct Current (Duty S1)	24 Volts	48 Volts	
	0,6 kW	0,6 kW	KE

Special Motor **
without Motor XX

VOLTAGE

12 Volts =	1
24 Volts =	2
48 Volts =	4
Special Voltage	*
without Motor	X

CURRENT

Direct	C
without Motor	X

PUMP CAPACITY

0,25	cc / rev	0,015 Cubic / inch	025
0,50	cc / rev	0,030 Cubic / inch	050
0,75	cc / rev	0,045 Cubic / inch	075
1	cc / rev	0,060 Cubic / inch	100
1,25	cc / rev	0,075 Cubic / inch	125
1,50	cc / rev	0,090 Cubic / inch	150
2	cc / rev	0,120 Cubic / inch	200

TYPE OF SHAFT
Tang T

RELAY
without Relay X
with Relay R

DECOMPRESSION DEVICE on port (3)

without decompression	XX
Special decompression	**

Decompression by electrical control

	VNF	VNO	VLB
12 Volts =	12	22	32
24 Volts =	14	24	34
36 Volts =	16	26	36
48 Volts =	18	28	38
24 Volts ~	15	25	35
48 Volts ~	17	27	37
110 Volts ~	11	21	31
220 Volts ~	13	23	33

Manual lowering valve 20
Decompression by a 3 ways valve with free flow 40

■ in vertical position only.
▲ in horizontal position only.
Motor with thermo-switch : consult our technical departments .
◆ Mounting with check valve only up to Ø 2,5 maxi .
NB :in Standard mounting mounting of a VNF in decompression device.

The tank filling cap and the motor terminals are mounted on ports 1 and 2 side.

The relay is mounted on port 3 side.

RELIEF VALVE
P Sealed
N Not sealed

SETTING PRESSURE of the ADJUSTABLE RELIEF VALVE (on port (5)) (full flow of By-Pass)
1 0 to 110 Bar
2 90 to 300 Bar

FLOW RESTRICTOR or FLOW LIMITOR ◆
X without Flow restrictor or Flow Limitor

A Ø 0,8	F Ø 1,6	L Ø 2,2	S Ø 3
B Ø 1	Z Ø 1,7	M Ø 2,3	T Ø 3,2
C Ø 1,2	G Ø 1,8	N Ø 2,4	U Ø 3,4
D Ø 1,3	H Ø 1,9	P Ø 2,5	V Ø 3,6
E Ø 1,4	J Ø 2	Q Ø 2,6	* Special Ø
Y Ø 1,5	K Ø 2,1	R Ø 2,8	

PORTS
10 1 Port (1) (Pressure + Return)
11 1 Port (1) + Flow restrictor on port (31)
12 1 Port (1) + Flow Limitor on port (3)
20 2 Ports (1) and (2) ▼ (1 second return) (without hose on port (31))
21 2 Ports (1) and (2) + Flow restrictor on port (31)
22 2 Ports (1) and (2) + Flow Limitor on port (3)
23 2 Ports (1) and (2) ▼ (1 second return) (with hose on port (31))
** Special outlet port
40 Special block on ports

FIXING POSITIONS (F.T.R 0187)
1 Horizontal
2 Vertical
3 Position 3
4 Position 4
5 Position 5

TANKS

F	▲	0,5	L	0,13 US/Gallon	Ø	B	■	3 L	0,79 US/Gallon Ø
W		0,75	L	0,20 US/Gallon	Ø	S	■	4 L	1,05 US/Gallon Ø
P		1	L	0,26 US/Gallon	Ø	C		5 L	1,32 US/Gallon □
T		1,1	L	0,29 US/Gallon	Ø	U	■	6 L	1,58 US/Gallon □
E		1,5	L	0,40 US/Gallon	Ø	Z	■	6 L	1,58 US/Gallon Ø
A		2	L	0,53 US/Gallon	Ø	*		Special tank	
H		2,5	L	0,66 US/Gallon	Ø	X		without tank	
M	▲	2,8	L	0,73 US/Gallon	□				

MICRO POWER PACKS " CODING CHART "
DIRECT CURRENT VERSION 1G SERIES 0

ALTERNATING CURRENT

Three - Phase

Type *Type* Typ	Power *Puissance* Leistung kW	
	S1	S3
71	0,26 0,50	0,55 0,80 1,10
80	0,95	

Singlephase

Type *Type* Typ	Power *Puissance* Leistung kW	
	S1	S3
71		0,75
80	0,75	1,10

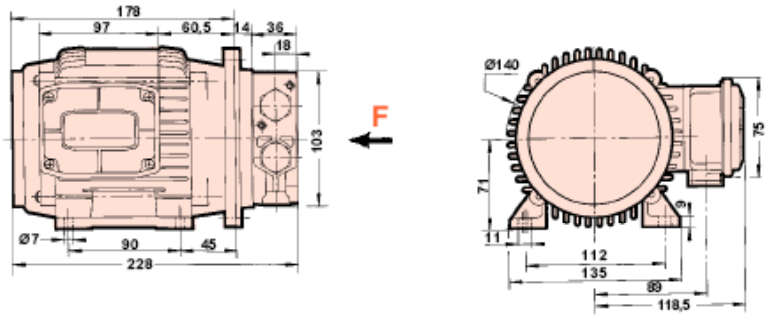
ALTERNATING CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	6	T	Sign Signe Zeichen	T	X							

(F.T R 0180)

MOTOR TYPE **ALTERNATING CURRENT** (Sign - *Signe* - Zeichen II - III - IV)



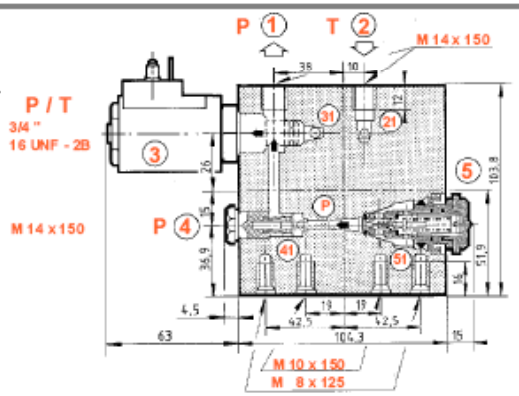
CODE / CODE / KODE	VOLTAGE / TENSION / SPANNUNG	MOTOR REFERENCE / REFERENCE MOTEUR / MOTOR REFERENZ	SPEED rev / min / VITESSE t / min / DREHZAHL U / min	POWER kW / PUISSANCE kW / LEISTUNG kW	DUTY / SERVICE / E.D	NOTA / NOTA / NOTA	MASSE Kg / MASSE Kg / MASSE Kg
NK 6	230/400	112 874	3000	0,55	S3	NV	4,4
NF 6	230/400	112 873	3000	0,80	S3	NV	6
NP 6	230/400	112 872	3000	1,10	S3	NV	6,9

NV Not cooled / *Non Ventilé* / nicht belüftet

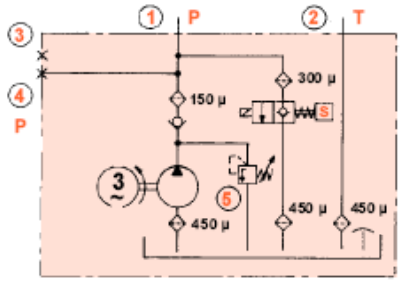
PUMP TYPE (Sign - *Signe* - Zeichen I - V)

MODEL / MODELE / TYP	Capacity: c c / rev	Capacité: cm 3 / t	Fördervolumen: cm 3 / U	cubic / inch	cubic / inch	cubic / inch
0025	0,25			0,01		
0050	0,50			0,03		
0075	0,75			0,04		
0100	1			0,06		
0125	1,25			0,07		
0150	1,50			0,09		
0200	2,00			0,12		

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see pages 049 and 154)

CONNECTION : Bell housings - Couplings - Interfaces

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) -
Méchanical Lowering Valve (VDM)
Pressure Relief Valve (VLP)
Flow Regulator - Hollow Screws
Manual Decompressure Switch

MICRO POWER - PACKS 1G

THREE - PHASE TYPE 71 DUTY S3

SHORT VERSION

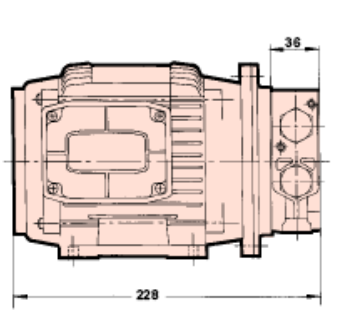
ALTERNATING CURRENT

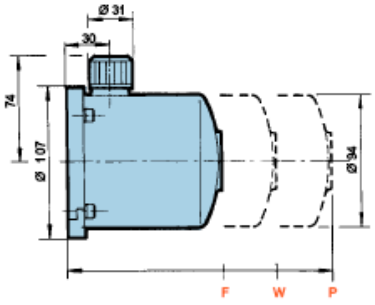
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	6	T	Sign Signe Zeichen	T	X							

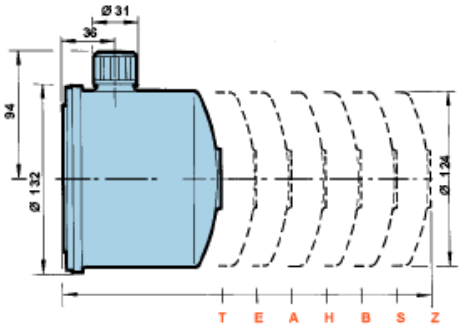
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)

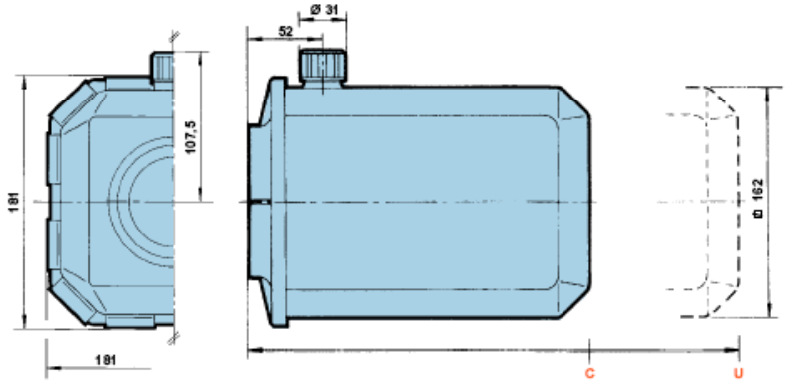




CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
F	0,5 L	110
W	0,75 L	150
P	1 L	190



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
T	1,1 L	111
E	1,5 L	148
A	2 L	193,5
H	2,5 L	244
B	3 L	284,5
S	4 L	390
Z	6 L	606



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
C	5 L	242
U	6 L	297

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
▲ F	0,5 L		0,4 L
W	0,75 L	0,7 L	0,6 L
P	1 L	0,9 L	0,8 L
T	1,1 L	1,1 L	0,7 L
E	1,5 L	1,4 L	1 L
A	2 L	2 L	1,4 L

▲ In horizontal position only

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
H	2,5 L	2,4 L	2 L
■ B	3 L		2,3 L
■ S	4 L		3,4 L
■ Z	6 L		5,3 L
C	5 L	4,7 L	3,8 L
■ U	6 L		5 L

■ In vertical position only

MICRO POWER - PACKS 1G THREE - PHASE TYPE 71 DUTY S3

SHORT VERSION

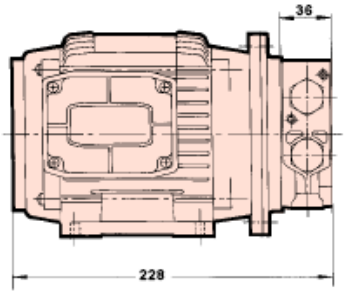
ALTERNATING CURRENT

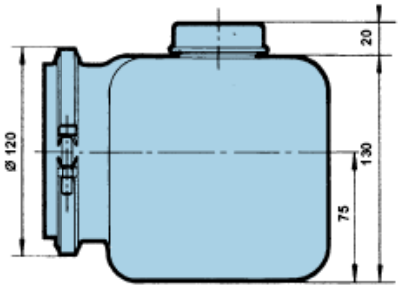
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	6	T	Sign Signe Zeichen	T	X							

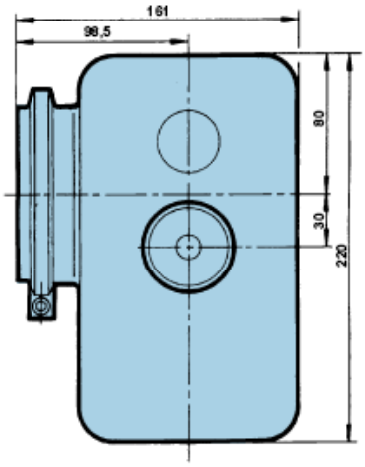
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)





CODE *CODE* KODE	TYPE *TYPE* TYP
M	2,8 L



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
■ M	2,8 L		2,28 L

■ In vertical position only

MICRO POWER - PACKS 1G THREE - PHASE TYPE 71 DUTY S3

SHORT VERSION

ALTERNATING CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	NK	6	T	Sign Signe Zeichen	T	X							

(F.T R 0180)

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	NF	6	T	Sign Signe Zeichen	T	X							

(F.T R 0180)

PUMPS *POMPES* PUMPEN		PRESSURE - *PRESSION* - DRUCK									
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	125 bar 1810 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	280 bar 4060 PSI
0025	Q	0,75	0,74	0,73	0,73	0,72	0,72	0,71	0,71	0,70	0,70
	I	1,00	1,05	1,10	1,12	1,15	1,17	1,20	1,22	1,25	1,30
	S3	50	50	50	50	50	50	50	50	50	50
	dBa	50	52	53	54	54	55	55	56	56	56
0050	Q	1,50	1,45	1,43	1,42	1,41	1,40	1,38	1,35	1,32	1,28
	I	1,00	1,07	1,20	1,25	1,30	1,35	1,40	1,50	1,60	1,70
	S3	50	50	50	44	35	27	21	17	14	10
	dBa	52	54	55	56	56	57	57	58	58	59
0075	Q	2,25	2,18	2,10	2,05	2,00	1,95				
	I	1,00	1,09	1,30	1,40	1,50	1,60				
	S3	50	50	35	24	17	12				
	dBa	53	56	57	58	58	59				
0100	Q	3,00	2,85	2,80	2,75						
	I	1,00	1,12	1,40	1,55						
	S3	50	50	22	14						
	dBa	55	59	60	61						
0125	Q	3,75	3,55	3,45							
	I	1,10	1,20	1,50							
	S3	50	44	14							
	dBa	57	61	61							
0150	Q	4,50	4,20	3,90							
	I	1,10	1,30	1,70							
	S3	50	35	10							
	dBa	58	62	63							
0200	Q	6,00	5,50								
	I	1,10	1,40								
	S3	50	21								
	dBa	59	63								

Q
Flow in l / min
Débit en l / min
Fördermenge in l / min

I
Amperage
Intensité en Ampères
Stromstärke in Ampere

DUTIES
SERVICES
E.D
S3 % (10 min)

dBa
Noise at 1 meter
Bruit à 1 mètre
Schalldruck bei
1 Meter Abstand

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MICRO POWER PACKS

ALTERNATING CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	NP	6	T	Sign Signe Zeichen	T	X							

(F.T R 0180)

Q
Flow in l / min
Débit en l / min
Fördermenge in l / min

I
Amperage
Intensité en Ampères
Stromstärke in Ampere

DUTIES
SERVICES
E.D
S3 % (10 min)

dBa
Noise at 1 meter
Bruit à 1 mètre
Schalldruck bei 1 Meter Abstand

PUMPS / POMPES / PUMPEN		PRESSURE - PRESSION - DRUCK									
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	125 bar 1810 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	280 bar 4060 PSI
0025	Q	0,75	0,74	0,73	0,73	0,72	0,72	0,71	0,71	0,70	0,70
	I	1,10	1,15	1,20	1,22	1,25	1,27	1,30	1,32	1,35	1,40
	S3	50	50	50	50	50	50	50	50	50	50
	dBa	52	53	54	55	55	56	56	57	57	57
0050	Q	1,50	1,47	1,45	1,44	1,43	1,42	1,40	1,37	1,34	1,30
	I	1,10	1,17	1,30	1,35	1,40	1,45	1,50	1,60	1,70	1,80
	S3	50	50	50	50	50	43	38	32	27	21
	dBa	54	55	56	57	57	58	58	59	59	60
0075	Q	2,25	2,20	2,15	2,13	2,10	2,05	2,00	1,90	1,85	
	I	1,10	1,20	1,40	1,50	1,60	1,80	1,95	2,10	2,30	
	S3	50	50	50	39	32	24	19	15	11	
	dBa	56	57	58	59	59	60	61	62	63	
0100	Q	3,00	2,95	2,90	2,85	2,80	2,75	2,70			
	I	1,10	1,25	1,50	1,65	1,80	2,10	2,40			
	S3	50	50	38	28	20	14	10			
	dBa	58	60	61	62	62	63	64			
0125	Q	3,75	3,60	3,55	3,50	3,45					
	I	1,20	1,30	1,70	1,95	2,20					
	S3	50	50	28	18	12					
	dBa	60	62	62	63	64					
0150	Q	4,50	4,30	4,10	4,00						
	I	1,20	1,40	1,90	2,20						
	S3	50	50	20	12						
	dBa	61	63	64	65						
0200	Q	6,00	5,70	5,40							
	I	1,20	1,60	2,30							
	S3	50	37	10							
	dBa	62	64	66							

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MICRO POWER PACKS

ALTERNATING CURRENT

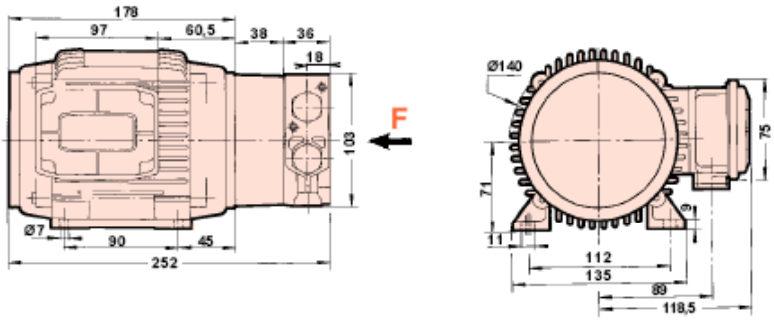
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign *Signe* Zeichen	6	T	Sign *Signe* Zeichen	C	X							

(F.T R 0180)

MOTOR TYPE / *TYPE de MOTEUR* / MOTOR TYP — ALTERNATING CURRENT / *COURANT ALTERNATIF* / WECHSELSTROM (Sign - *Signe* - Zeichen II - III - IV)

PUMP TYPE / *TYPE de POMPE* (Sign - *Signe* - Zeichen I - V) / PUMPE TYP

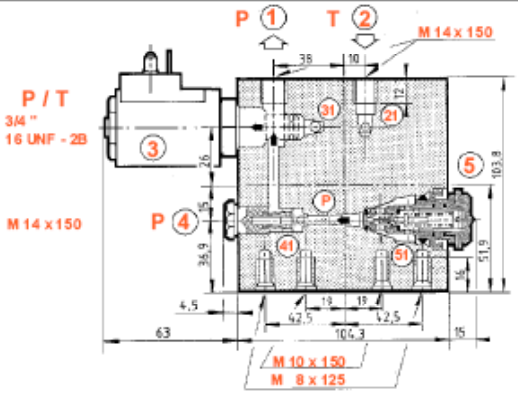


CODE / *CODE* / KODE	VOLTAGE / *TENSION* / SPANNUNG	MOTOR REFERENCE / *REFERENCE MOTEUR* / MOTOR REFERENZ	SPEED rev / min / *VITESSE t / min* / DREHZAHL U / min	POWER kW / *PUISSANCE kW* / LEISTUNG kW	DUTY / *SERVICE* / E.D	NOTA / *NOTA* / NOTA	MASSE Kg / *MASSE Kg* / MASSE Kg
NB 6	230/400	112 476	3000	0,55	S3	NV	4,4
NG 6	230/400	112 423	3000	0,80	S3	NV	6
NH 6	230/400	112 120	3000	1,10	S3	NV	6,9

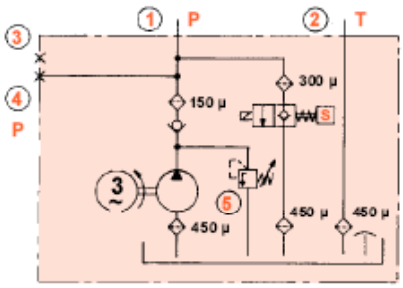
NV — Not cooled / *Non Ventilé* / nicht belüftet

MODEL / *MODELE* / TYP	Capacity / *Capacité* / Fördervolumen	
	c c / rev / *cm 3 / t* / cm 3 / U	cubic / inch / *cubic / inch* / cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2,00	0,12

VIEW / *VUE* / ANSICHT F



Basic hydraulic sketch of a MICRO POWER PACK / *Schéma hydraulique de base d'une MICRO - CENTRALE* / Grund - Hydraulikschema eines MIKRO - AGGREGATS



ACCESSORIES (see pages 049 and 154)

CONNECTION : Bell housings - Couplings - Interfaces

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4/2 Ways Valves - Manifolds - Check Valves (VAR) -
Méchanical Lowering Valve (VDM)
Pressure Relief Valve (VLP)
Flow Regulator - Hollow Screws
Manual Decompressure Switch

MICRO POWER - PACKS 1G

THREE - PHASE TYPE 71 DUTY S3

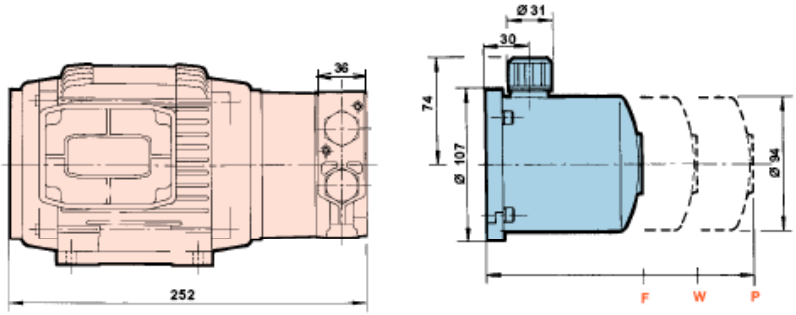
ALTERNATING CURRENT

CODIFICATION

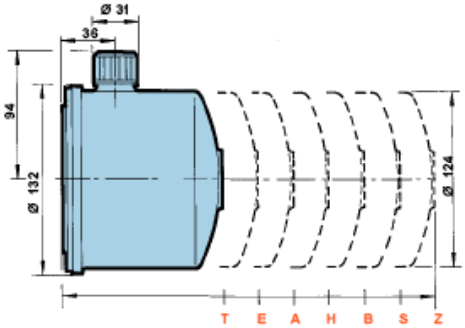
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	6	T	Sign Signe Zeichen	C	X							

(F.T R 0180)

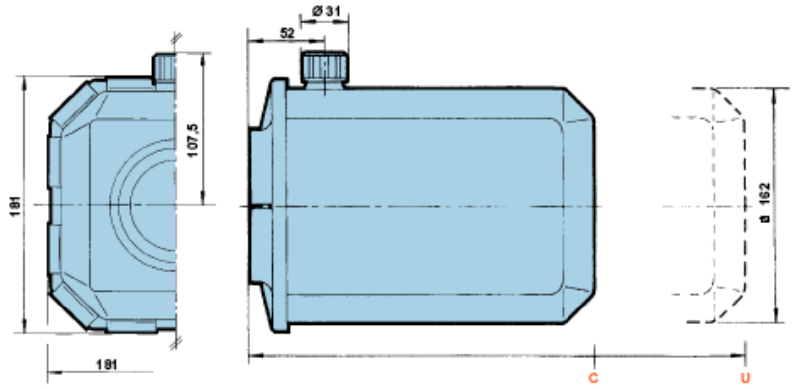
TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
F	0,5 L	110
W	0,75 L	150
P	1 L	190



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
T	1,1 L	111
E	1,5 L	148
A	2 L	193,5
H	2,5 L	244
B	3 L	284,5
S	4 L	390
Z	6 L	606



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
C	5 L	242
U	6 L	297

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
▲ F	0,5 L		0,4 L
W	0,75 L	0,7 L	0,6 L
P	1 L	0,9 L	0,8 L
T	1,1 L	1,1 L	0,7 L
E	1,5 L	1,4 L	1 L
A	2 L	2 L	1,4 L

▲ In horizontal position only

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
H	2,5 L	2,4 L	2 L
■ B	3 L		2,3 L
■ S	4 L		3,4 L
■ Z	6 L		5,3 L
C	5 L	4,7 L	3,8 L
■ U	6 L		5 L

■ In vertical position only

MICRO POWER - PACKS 1G THREE - PHASE TYPE 71 DUTY S3

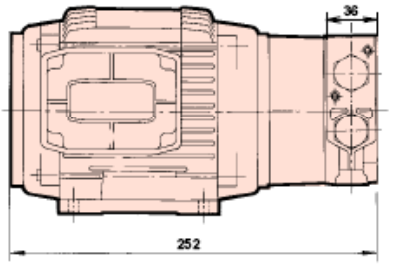
ALTERNATING CURRENT

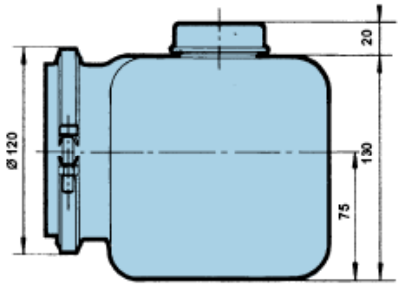
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	6	T	Sign Signe Zeichen	C	X							

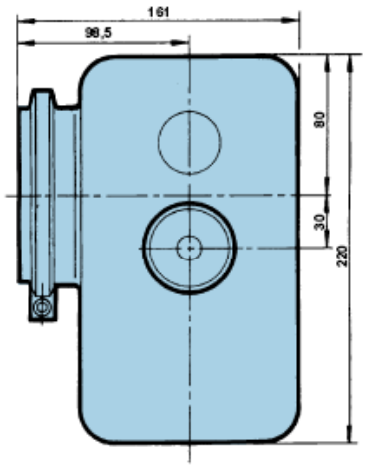
(F.T R 0180)

TYPE of TANKS (Sign - Signe - Zeichen IX-X)





CODE *CODE* KODE	TYPE *TYPE* TYP
M	2,8 L



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
■ M	2,8 L		2,28 L

■ In vertical position only

MICRO POWER - PACKS 1G THREE - PHASE TYPE 71 DUTY S3

ALTERNATING CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	NB	6	T	Sign Signe Zeichen	C	X							

(F.T R 0180)

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	NG	6	T	Sign Signe Zeichen	C	X							

(F.T R 0180)

Q
Flow in l / min
Débit en l / min
Fördermenge in l / min

I
Amperage
Intensité en Ampères
Stromstärke in Ampere

DUTIES
SERVICES
E.D
S3 % (10 min)

dBa
Noise at 1 meter
Bruit à 1 mètre
Schalldruck bei
1 Meter Abstand

PUMPS *POMPES* PUMPEN		PRESSURE - *PRESSION* - DRUCK									
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	125 bar 1810 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	280 bar 4060 PSI
0025	Q	0,75	0,74	0,73	0,73	0,72	0,72	0,71	0,71	0,70	0,70
	I	1,00	1,05	1,10	1,12	1,15	1,17	1,20	1,22	1,25	1,30
	S3	50	50	50	50	50	50	50	50	50	50
	dBa	50	52	53	54	54	55	55	56	56	56
0050	Q	1,50	1,45	1,43	1,42	1,41	1,40	1,38	1,35	1,32	1,28
	I	1,00	1,07	1,20	1,25	1,30	1,35	1,40	1,50	1,60	1,70
	S3	50	50	50	44	35	27	21	17	14	10
	dBa	52	54	55	56	56	57	57	58	58	59
0075	Q	2,25	2,18	2,10	2,05	2,00	1,95				
	I	1,00	1,09	1,30	1,40	1,50	1,60				
	S3	50	50	35	24	17	12				
	dBa	53	56	57	58	58	59				
0100	Q	3,00	2,85	2,80	2,75						
	I	1,00	1,12	1,40	1,55						
	S3	50	50	22	14						
	dBa	55	59	60	61						
0125	Q	3,75	3,55	3,45							
	I	1,10	1,20	1,50							
	S3	50	44	14							
	dBa	57	61	61							
0150	Q	4,50	4,20	3,90							
	I	1,10	1,30	1,70							
	S3	50	35	10							
	dBa	58	62	63							
0200	Q	6,00	5,50								
	I	1,10	1,40								
	S3	50	21								
	dBa	59	63								

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MICRO POWER PACKS

ALTERNATING CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	NH	6	T	Sign *Signe* Zeichen	C	X							

(F.T R 0180)

PUMPS *POMPES* PUMPEN		PRESSURE - *PRESSION* - DRUCK									
		5 bar 72 PSI	50 bar 725 PSI	100 bar 1450 PSI	125 bar 1810 PSI	150 bar 2175 PSI	175 bar 2540 PSI	200 bar 2900 PSI	225 bar 3260 PSI	250 bar 3630 PSI	280 bar 4060 PSI
0025	Q	0,75	0,74	0,73	0,73	0,72	0,72	0,71	0,71	0,70	0,70
	I	1,10	1,15	1,20	1,22	1,25	1,27	1,30	1,32	1,35	1,40
	S3	50	50	50	50	50	50	50	50	50	50
	dBa	52	53	54	55	55	56	56	57	57	57
0050	Q	1,50	1,47	1,45	1,44	1,43	1,42	1,40	1,37	1,34	1,30
	I	1,10	1,17	1,30	1,35	1,40	1,45	1,50	1,60	1,70	1,80
	S3	50	50	50	50	50	43	38	32	27	21
	dBa	54	55	56	57	57	58	58	59	59	60
0075	Q	2,25	2,20	2,15	2,13	2,10	2,05	2,00	1,90	1,85	
	I	1,10	1,20	1,40	1,50	1,60	1,80	1,95	2,10	2,30	
	S3	50	50	50	39	32	24	19	15	11	
	dBa	56	57	58	59	59	60	61	62	63	
0100	Q	3,00	2,95	2,90	2,85	2,80	2,75	2,70			
	I	1,10	1,25	1,50	1,65	1,80	2,10	2,40			
	S3	50	50	38	28	20	14	10			
	dBa	58	60	61	62	62	63	64			
0125	Q	3,75	3,60	3,55	3,50	3,45					
	I	1,20	1,30	1,70	1,95	2,20					
	S3	50	50	28	18	12					
	dBa	60	62	62	63	64					
0150	Q	4,50	4,30	4,10	4,00						
	I	1,20	1,40	1,90	2,20						
	S3	50	50	20	12						
	dBa	61	63	64	65						
0200	Q	6,00	5,70	5,40							
	I	1,20	1,60	2,30							
	S3	50	37	10							
	dBa	62	64	66							

Q
Flow in l / min
Débit en l / min
Fördermenge in l / min

I
Amperage
Intensité en Ampères
Stromstärke in Ampere

DUTIES
SERVICES
ED

S3 % (10 min)

dBa
Noise at 1 meter
Bruit à 1 mètre
Schalldruck bei
1 Meter Abstand

MAIN ELECTRO - HYDRAULIC CHARACTERISTICS OF MICRO POWER PACKS

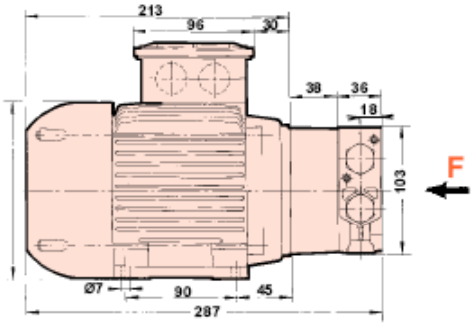
ALTERNATING CURRENT

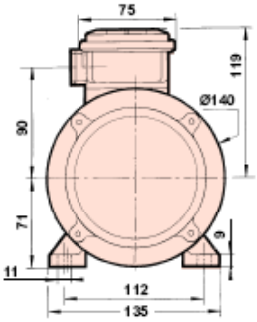
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign *Signe* Zeichen	6	T	Sign *Signe* Zeichen	C	X							

(F.T R 0180)

MOTOR TYPE **ALTERNATING CURRENT** (Sign - *Signe* - Zeichen II - III - IV)





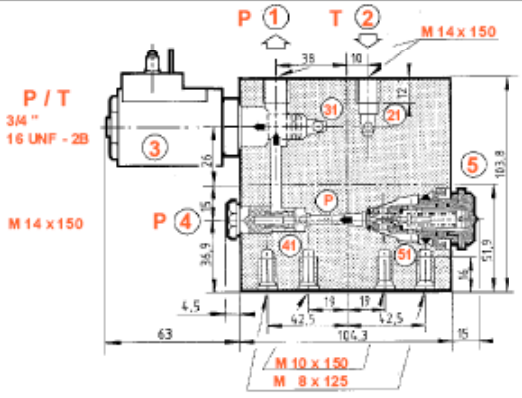
CODE / CODE / KODE	VOLTAGE / TENSION / SPANNUNG	MOTOR REFERENCE / REFERENCE MOTEUR / MOTOR REFERENZ	SPEED rev / min / VITESSE t / min / DREHZAHL U / min	POWER kW / PUISSANCE kW / LEISTUNG kW	DUTY / SERVICE / E.D	NOTA / NOTA / NOTA	MASSE Kg / MASSE Kg / MASSE Kg
NA 6	230/400	112 484	1500	0,26	S1	V	5,7
NC 6	230/400	112 485	1500	0,50	S1	V	7,3

V Cooled *Ventilé* belüftet

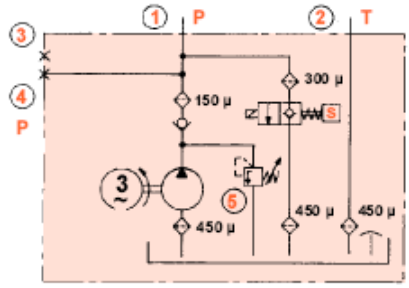
PUMP TYPE (Sign - *Signe* - Zeichen I - V)

MODEL / MODELE / TYP	Capacity / Capacité / Fördervolumen: c c / rev, cm 3 / t, cm 3 / U	cubic / inch, *cubic / inch*, cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2,00	0,12

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see pages 049 and 154)

CONNECTION : Bell housings - Couplings - Interfaces

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) - Méchanical Lowering Valve (VDM) Pressure Relief Valve (VLP) Flow Regulator - Hollow Screws Manual Decompressure Switch

MICRO POWER - PACKS 1G

THREE - PHASE TYPE 71 DUTY S1

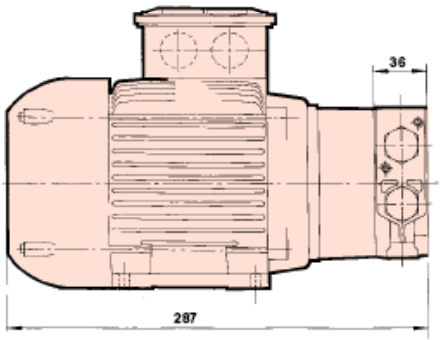
ALTERNATING CURRENT

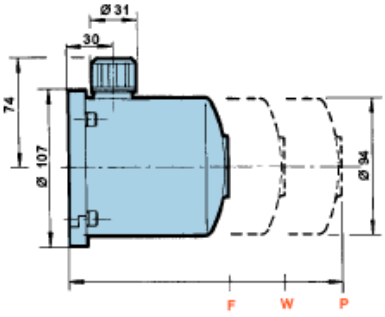
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	6	T	Sign Signe Zeichen	C	X							

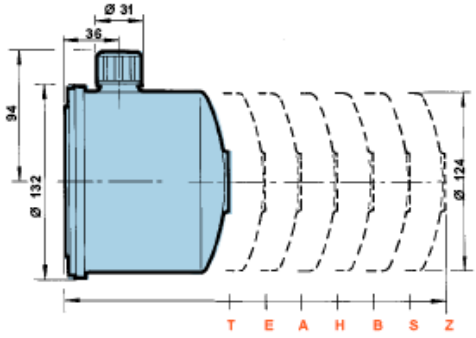
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)

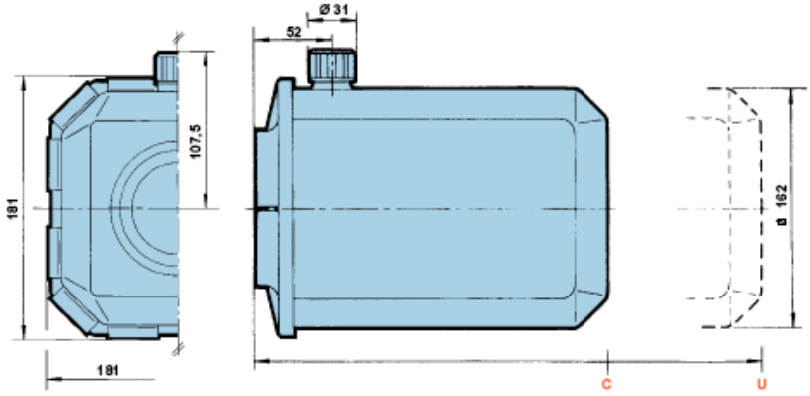




CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
F	0,5 L	110
W	0,75 L	150
P	1 L	190



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
T	1,1 L	111
E	1,5 L	148
A	2 L	193,5
H	2,5 L	244
B	3 L	284,5
S	4 L	390
Z	6 L	606



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
C	5 L	242
U	6 L	297

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
▲ F	0,5 L		0,4 L
W	0,75 L	0,7 L	0,6 L
P	1 L	0,9 L	0,8 L
T	1,1 L	1,1 L	0,7 L
E	1,5 L	1,4 L	1 L
A	2 L	2 L	1,4 L

▲ In horizontal position only

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
H	2,5 L	2,4 L	2 L
■ B	3 L		2,3 L
■ S	4 L		3,4 L
■ Z	6 L		5,3 L
C	5 L	4,7 L	3,8 L
■ U	6 L		5 L

■ In vertical position only

INTERFLUID Hidráulica S.L.U - Ctra. de Torrelles, 34 - E-08620 - Sant Vicenç dels Horts – Barcelona - España
Telf : +34 93 656.27.97 - Fax : +34 93.676.98.25 - www.interfluid.es

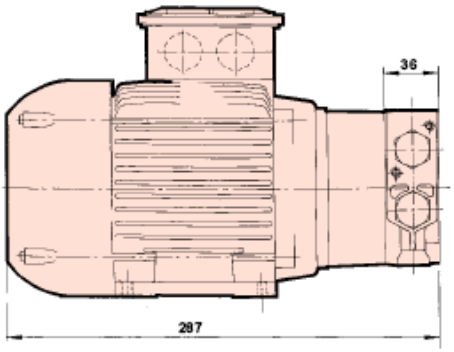
ALTERNATING CURRENT

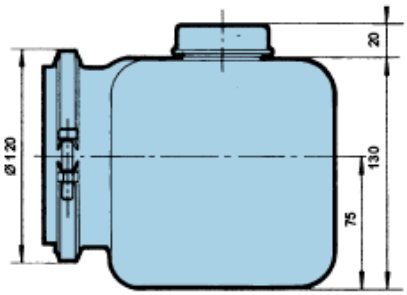
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign *Signe* Zeichen	6	T	Sign *Signe* Zeichen	C	X							

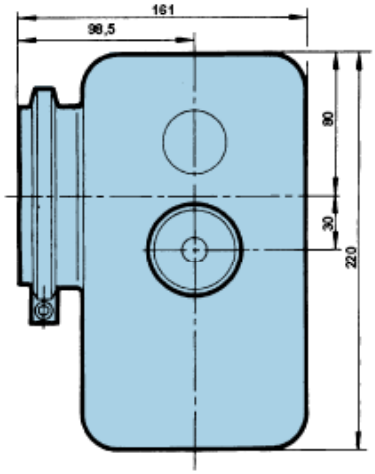
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)





CODE *CODE* KODE	TYPE *TYPE* TYP
M	2,8 L



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
■ M	2,8 L		2,28 L

■ In vertical position only

MICRO POWER - PACKS 1G THREE - PHASE TYPE 71 DUTY S1

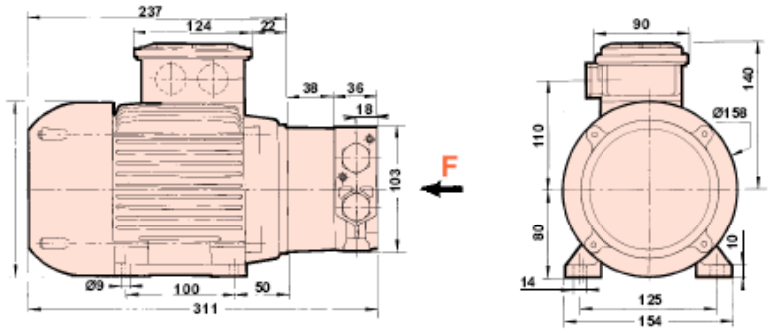
ALTERNATING CURRENT

CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	PC	6	T	Sign *Signe* Zeichen	C	X							

(F.T R 0180)

MOTOR TYPE **ALTERNATING CURRENT** (Sign - *Signe* - Zeichen II - III - IV)



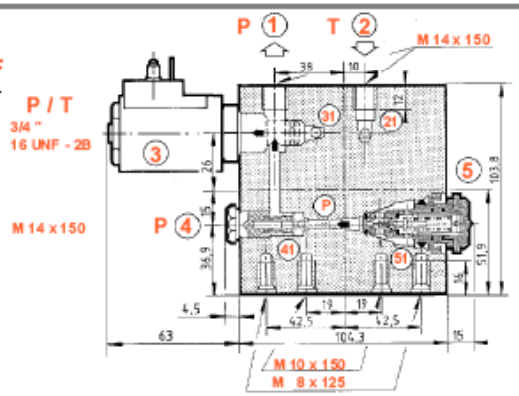
CODE	VOLTAGE	MOTOR REFERENCE	SPEED rev / min	POWER kW	DUTY	NOTA	MASSE Kg
CODE	*TENSION*	*REFERENCE MOTEUR*	*VITESSE t / min*	*PUISSANCE kW*	*SERVICE*	*NOTA*	*MASSE Kg*
KODE	SPANNUNG	MOTOR REFERENZ	DREHZAHL U / min	LEISTUNG kW	E.D.	NOTA	MASSE Kg
PC 6	230/400	112 486	1500	0,95	S1	V	10,6

V Cooled *Ventilé* belüftet

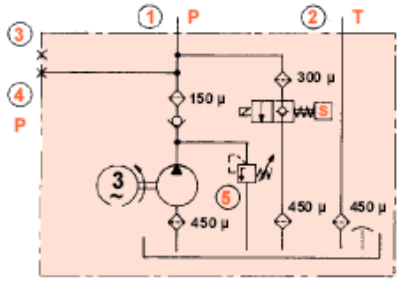
PUMP TYPE (Sign - *Signe* - Zeichen I - V)

MODEL / *MODELE* / TYP	Capacity c c / rev / *Capacité cm 3 / t* / Fördervolumen cm 3 / U	Capacity cubic / inch / *cubic / inch* / cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2,00	0,12

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see pages 049 and 154)

CONNECTION : Bell housings - Couplings - Interfaces

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) -
Méchanical Lowering Valve (VDM)
Pressure Relief Valve (VLP)
Flow Regulator - Hollow Screws
Manual Decompressure Switch

MICRO POWER - PACKS 1G

THREE - PHASE TYPE 80 DUTY S1

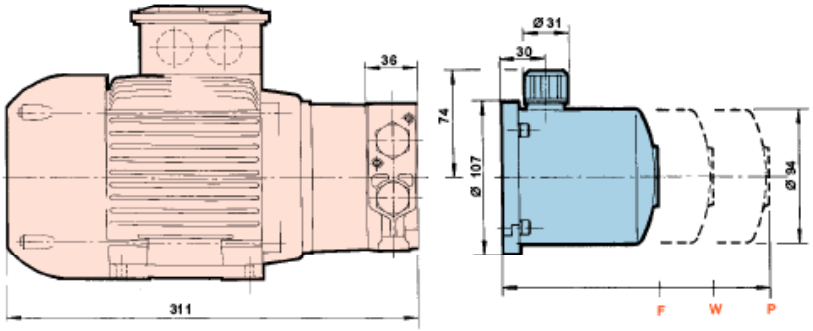
ALTERNATING CURRENT

CODIFICATION

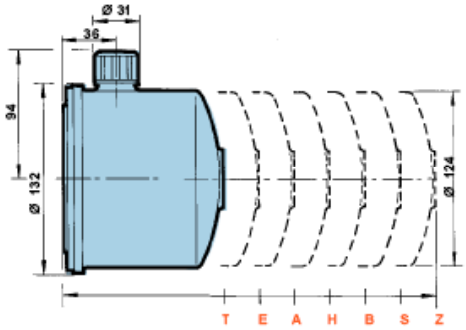
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	6	T	Sign Signe Zeichen	C	X							

(F.T R 0180)

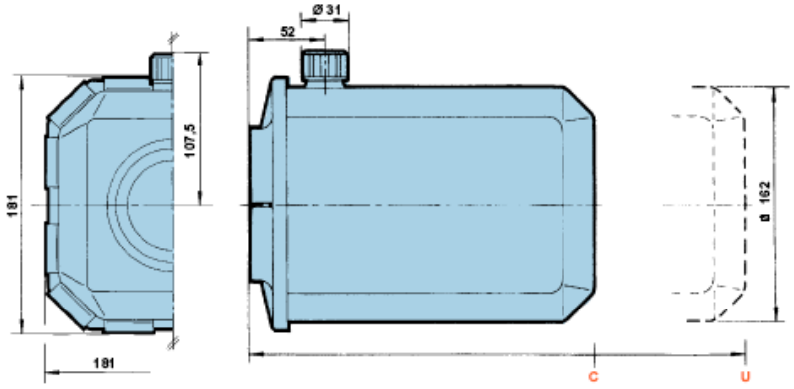
TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
F	0,5 L	110
W	0,75 L	150
P	1 L	190



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
T	1,1 L	111
E	1,5 L	148
A	2 L	193,5
H	2,5 L	244
B	3 L	284,5
S	4 L	390
Z	6 L	606



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
C	5 L	242
U	6 L	297

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
▲ F	0,5 L		0,4 L
W	0,75 L	0,7 L	0,6 L
P	1 L	0,9 L	0,8 L
T	1,1 L	1,1 L	0,7 L
E	1,5 L	1,4 L	1 L
A	2 L	2 L	1,4 L

▲ In horizontal position only

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
H	2,5 L	2,4 L	2 L
■ B	3 L		2,3 L
■ S	4 L		3,4 L
■ Z	6 L		5,3 L
C	5 L	4,7 L	3,8 L
■ U	6 L		5 L

■ In vertical position only

MICRO POWER - PACKS 1G THREE - PHASE TYPE 80 DUTY S1

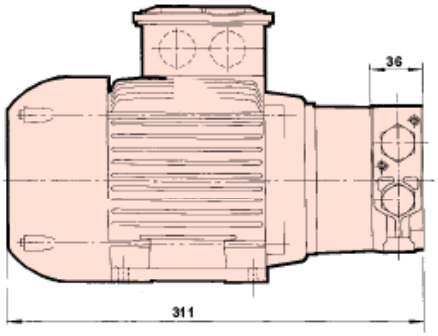
ALTERNATING CURRENT

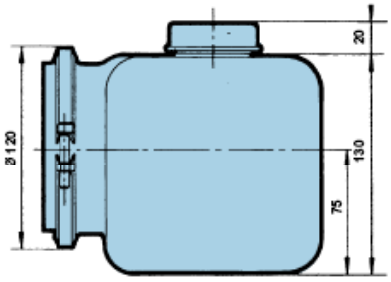
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	PC	6	T	Sign Signe Zeichen	C	X							

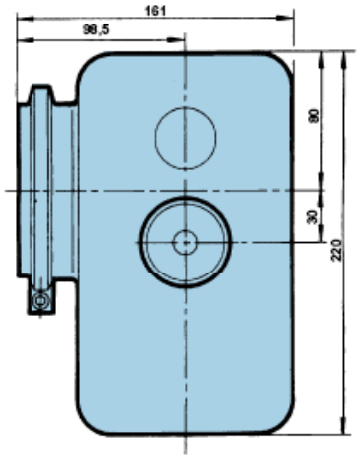
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)





CODE *CODE* KODE	TYPE *TYPE* TYP
M	2,8 L



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
■ M	2,8 L		2,28 L

■ In vertical position only

MICRO POWER - PACKS 1G THREE - PHASE TYPE 80 DUTY S1

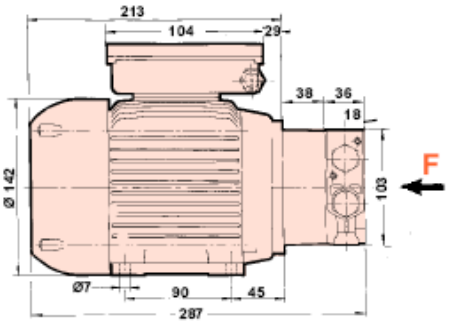
ALTERNATING CURRENT

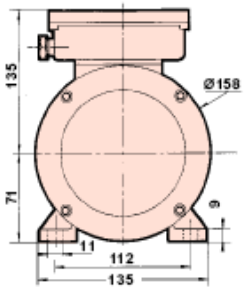
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	Sign Signe Zeichen	M	Sign Signe Zeichen	C	X							

(F.T R 0180)

MOTOR TYPE **ALTERNATING CURRENT** (Sign - *Signe* - Zeichen II - III - IV)





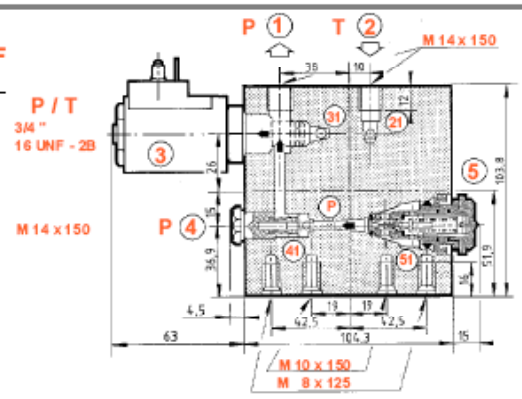
CODE / *CODE* / KODE	VOLTAGE / *TENSION* / SPANNUNG	MOTOR REFERENCE / *REFERENCE MOTEUR* / MOTOR REFERENZ	SPEED rev / min / *VITESSE t / min* / DREHZAHL U / min	POWER kW / *PUISSANCE kW* / LEISTUNG kW	DUTY / *SERVICE* / E.D	CONDENSER Starting / *CONDENSATEUR Démarrage* / KONDENSATOR Anlauf	CONDENSER Permanent / *CONDENSATEUR Permanent* / KONDENSATOR Permanent	NOTA / *NOTA* / NOTA	MASSE Kg / *MASSE Kg* / MASSE Kg
ND 8	100	112 643	3000	0,75	S3	50 - 63 µF	16 µF	NV	8,5
NE 9	220/230	112 644	3000	0,75	S3	40 µF	16 µF	NV	8,5
NF 5	110/115	112 645	3600	0,75	S3	25 µF	16 µF	NV	8,5

NV Not cooled / *Non Ventilé* / nicht belüftet

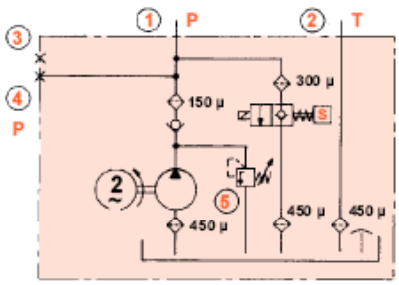
PUMP TYPE (Sign - *Signe* - Zeichen I - V)

MODEL / *MODELE* / TYP	Capacity: c c / rev / *Capacité cm 3 / t* / Fördervolumen cm 3 / U	Capacity: cubic / inch / *cubic / inch* / cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2,00	0,12

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see pages 049 and 154)

CONNECTION : Bell housings - Couplings - Interfaces

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) - Méchanical Lowering Valve (VDM) Pressure Relief Valve (VLP) Flow Regulator - Hollow Screws Manual Decompressure Switch

MICRO POWER - PACKS 1G

SINGLEPHASE TYPE 71 DUTY S3

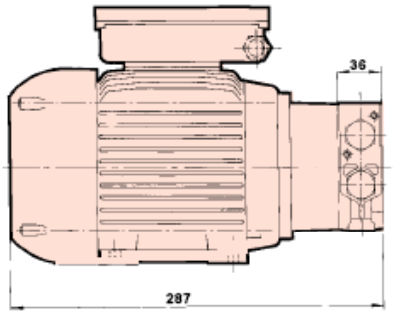
ALTERNATING CURRENT

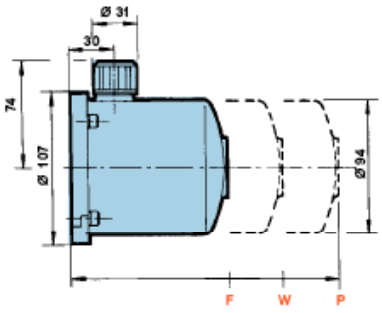
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	Sign Signe Zeichen	M	Sign Signe Zeichen	C	X							

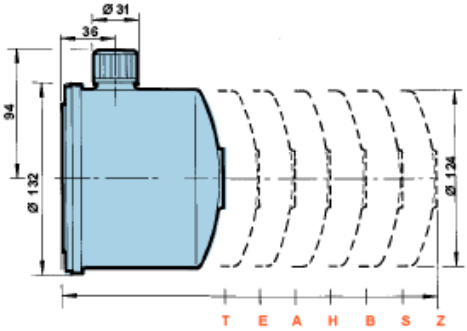
(F.T R 0180)

TYPE of TANKS (Sign - Signe - Zeichen IX-X)

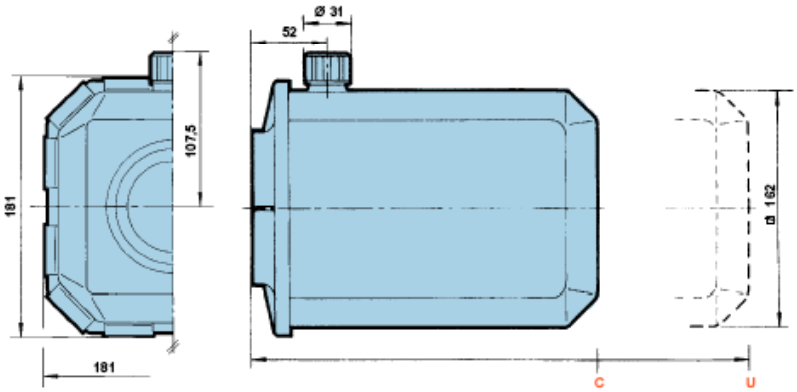




CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
F	0,5 L	110
W	0,75 L	150
P	1 L	190



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
T	1,1 L	111
E	1,5 L	148
A	2 L	193,5
H	2,5 L	244
B	3 L	284,5
S	4 L	390
Z	6 L	606



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
C	5 L	242
U	6 L	297

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
▲ F	0,5 L		0,4 L
W	0,75 L	0,7 L	0,6 L
P	1 L	0,9 L	0,8 L
T	1,1 L	1,1 L	0,7 L
E	1,5 L	1,4 L	1 L
A	2 L	2 L	1,4 L

▲ In horizontal position only

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
H	2,5 L	2,4 L	2 L
■ B	3 L		2,3 L
■ S	4 L		3,4 L
■ Z	6 L		5,3 L
C	5 L	4,7 L	3,8 L
■ U	6 L		5 L

■ In vertical position only

MICRO POWER - PACKS 1G SINGLEPHASE TYPE 71 DUTY S3

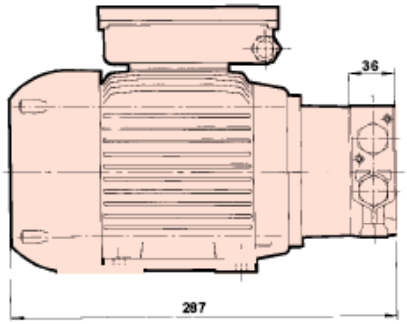
ALTERNATING CURRENT

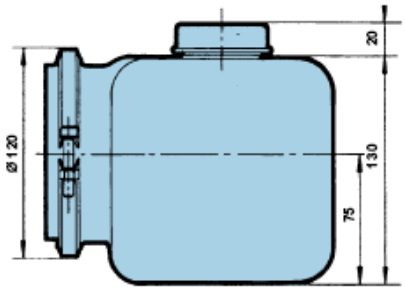
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign *Signe* Zeichen	Sign *Signe* Zeichen	M	Sign *Signe* Zeichen	C	X							

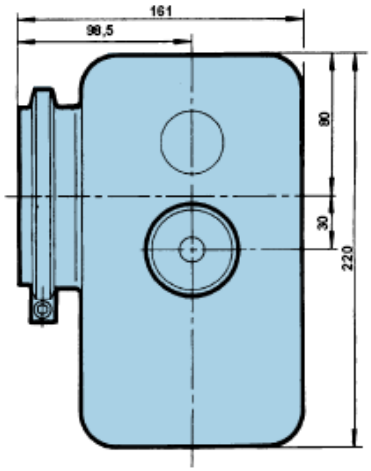
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)





CODE *CODE* KODE	TYPE *TYPE* TYP
M	2,8 L



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
■ M	2,8 L		2,28 L

■ In vertical position only

MICRO POWER - PACKS 1G SINGLEPHASE TYPE 71 DUTY S3

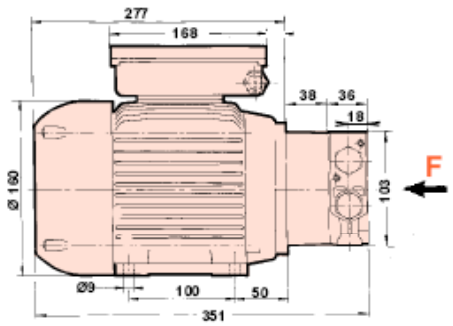
ALTERNATING CURRENT

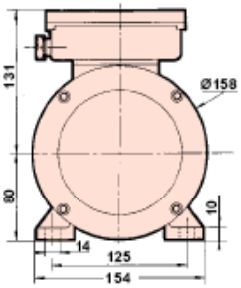
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	PG	9	M	Sign *Signe* Zeichen	C	X							

(F.T R 0180)

MOTOR TYPE **ALTERNATING CURRENT** (Sign - *Signe* - Zeichen II - III - IV)





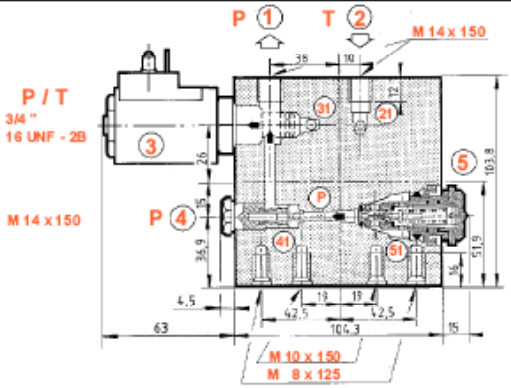
CODE	VOLTAGE	MOTOR REFERENCE	SPEED rev / min	POWER kW	DUTY	CONDENSER Starting	CONDENSER Permanent	NOTA	MASSE Kg
CODE	*TENSION*	*REFERENCE MOTEUR*	*VITESSE t /min*	*PUISSANCE kW*	*SERVICE*	*CONDENSATEUR Démarrage*	*CONDENSATEUR Permanent*	*NOTA*	*MASSE Kg*
KODE	SPANNUNG	MOTOR REFERENZ	DREHZAHL U / min	LEISTUNG kW	E.D	KONDENSATOR Anlauf	KONDENSATOR Permanent	NOTA	MASSE Kg
PG 9	220/230	112 677	3000	1,10	S3	80 - 100 µF	25 µF	NV	11,4

NV Not cooled *Non Ventilé* nicht belüftet

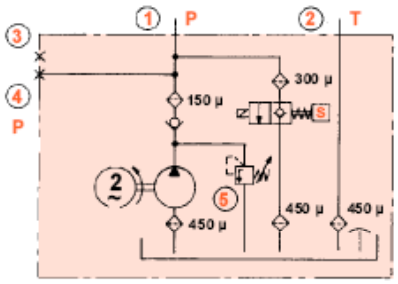
PUMP TYPE (Sign - *Signe* - Zeichen I - V)

MODEL / *MODELE* / TYP	Capacity cc / rev	Capacity cubic / inch	*Capacité cm 3 / t*	*Capacité cubic / inch*	Fördervolumen cm 3 / U	Fördervolumen cubic / inch
0025	0,25	0,01				
0050	0,50	0,03				
0075	0,75	0,04				
0100	1	0,06				
0125	1,25	0,07				
0150	1,50	0,09				
0200	2,00	0,12				

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see pages 049 and 154)

CONNECTION : Bell housings - Couplings - Interfaces

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) -
Méchanical Lowering Valve (VDM)
Pressure Relief Valve (VLP)
Flow Regulator - Hollow Screws
Manual Decompressure Switch

MICRO POWER - PACKS 1G

SINGLEPHASE TYPE 80 DUTY S3

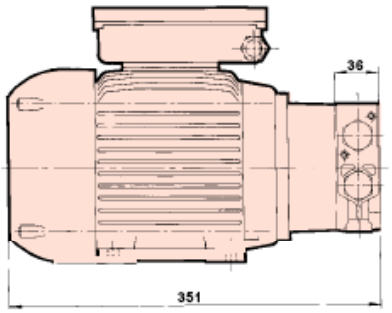
ALTERNATING CURRENT

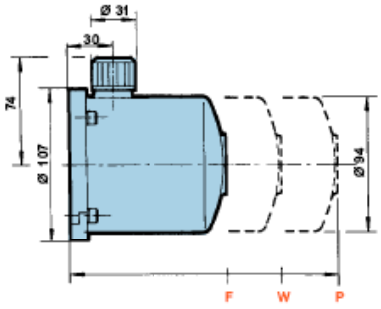
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	Sign Signe Zeichen	M	Sign Signe Zeichen	C	X							

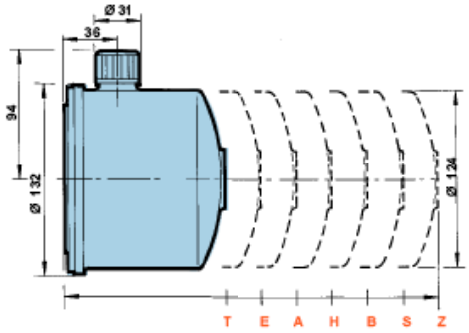
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)

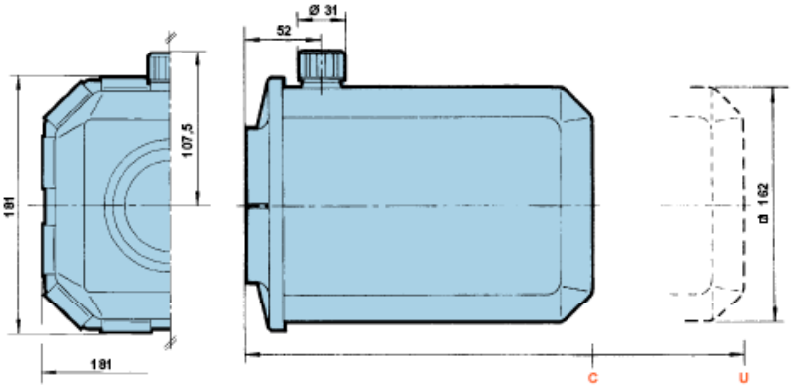




CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
F	0,5 L	110
W	0,75 L	150
P	1 L	190



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
T	1,1 L	111
E	1,5 L	148
A	2 L	193,5
H	2,5 L	244
B	3 L	284,5
S	4 L	390
Z	6 L	606



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
C	5 L	242
U	6 L	297

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
▲ F	0,5 L		0,4 L
W	0,75 L	0,7 L	0,6 L
P	1 L	0,9 L	0,8 L
T	1,1 L	1,1 L	0,7 L
E	1,5 L	1,4 L	1 L
A	2 L	2 L	1,4 L

▲ In horizontal position only

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
H	2,5 L	2,4 L	2 L
■ B	3 L		2,3 L
■ S	4 L		3,4 L
■ Z	6 L		5,3 L
C	5 L	4,7 L	3,8 L
■ U	6 L		5 L

■ In vertical position only

MICRO POWER - PACKS 1G SINGLEPHASE TYPE 80 DUTY S3

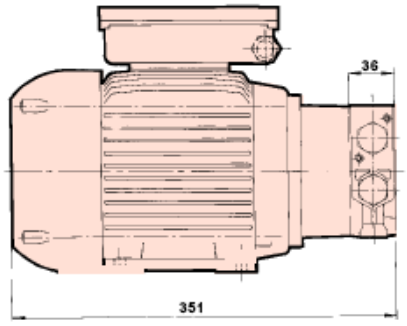
ALTERNATING CURRENT

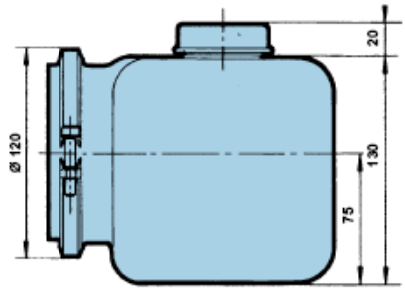
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	PG	9	M	Sign Signe Zeichen	C	X							

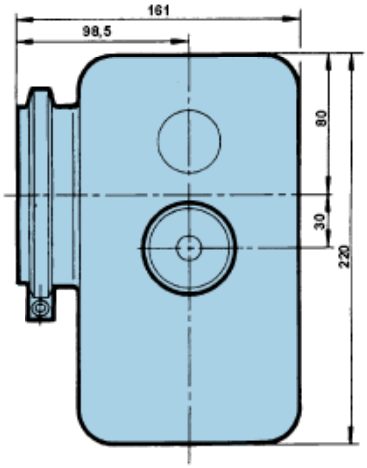
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)





CODE *CODE* KODE	TYPE *TYPE* TYP
M	2,8 L



TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
■ M	2,8 L		2,28 L

■ In vertical position only

MICRO POWER - PACKS 1G SINGLEPHASE TYPE 80 DUTY S3

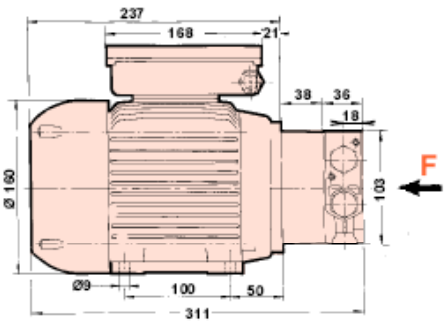
ALTERNATING CURRENT

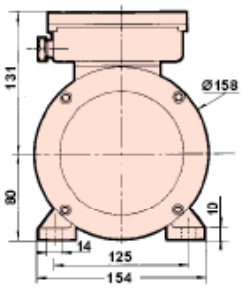
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	Sign Signe Zeichen	M	Sign Signe Zeichen	C	X							

(F.T R 0180)

MOTOR TYPE **ALTERNATING CURRENT** (Sign - *Signe* - Zeichen II - III - IV)





CODE / *CODE* / KODE	VOLTAGE / *TENSION* / SPANNUNG	MOTOR REFERENCE / *REFERENCE MOTEUR* / MOTOR REFERENZ	SPEED rev / min / *VITESSE t / min* / DREHZAHL U / min	POWER kW / *PUISSANCE kW* / LEISTUNG kW	DUTY / *SERVICE* / E.D	CONDENSER Starting / Permanent / *CONDENSATEUR Démarrage / Permanent* / KONDENSATOR Anlauf / Permanent	NOTA / *NOTA* / NOTA	MASSE Kg / *MASSE Kg* / MASSE Kg
PA 9	220/230	112 437	3000	0,75	S1	25 µF / 16 µF	V	11
PB 5	110/115	112 438	3600	0,75	S1	80 µF	V	11,4

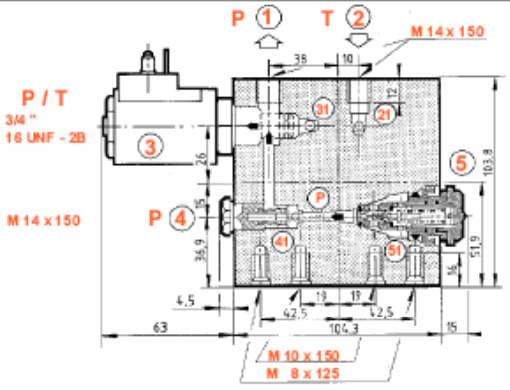
PB 5 approuved UL / *Certifié UL* / UL zertifiziert

V Cooled / *Ventilé* / Belüftet

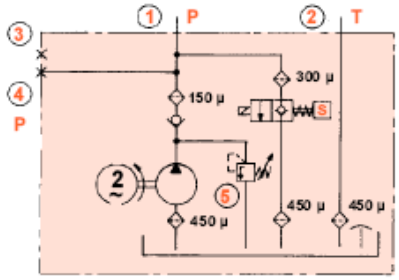
PUMP TYPE (Sign - *Signe* - Zeichen I - V)

MODEL / *MODELE* / TYP	Capacity: c c / rev / *Capacité: cm 3 / t* / Fördervolumen: cm 3 / U	Capacity: cubic / inch / *cubic / inch* / cubic / inch
0025	0,25	0,01
0050	0,50	0,03
0075	0,75	0,04
0100	1	0,06
0125	1,25	0,07
0150	1,50	0,09
0200	2,00	0,12

VIEW F



Basic hydraulic sketch of a MICRO POWER PACK



ACCESSORIES (see pages 049 and 154)

CONNECTION : Bell housings - Couplings - Interfaces

HYDRAULIC CONNECTION : Adaptors - Pressure Port Adaptors

DISTRIBUTION and REGULATION :
Electro Poppet Valves (V.N.O - V.N.F - V.L.B) - 4 / 2 Ways Valves - Manifolds - Check Valves (VAR) - Méchanical Lowering Valve (VDM) Pressure Relief Valve (VLP) Flow Regulator - Hollow Screws Manual Decompressure Switch

MICRO POWER - PACKS 1G

SINGLEPHASE TYPE 80 DUTY S1

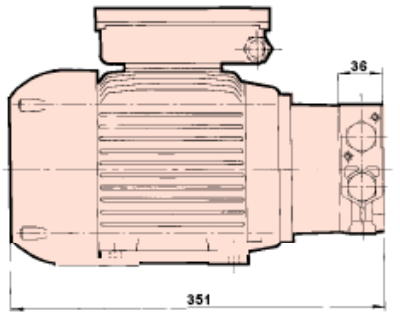
ALTERNATING CURRENT

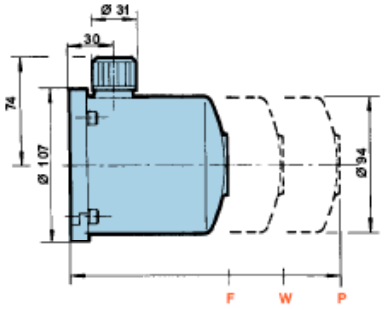
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign *Signe* Zeichen	Sign *Signe* Zeichen	M	Sign *Signe* Zeichen	C	X							

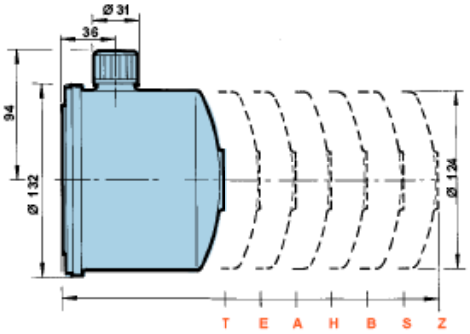
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)

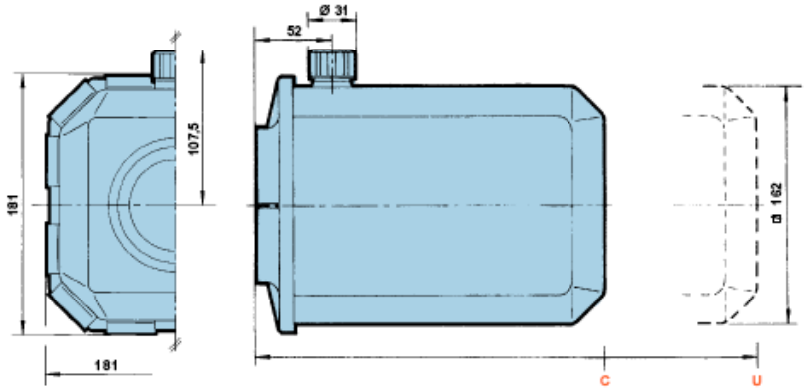




CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
F	0,5 L	110
W	0,75 L	150
P	1 L	190



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
T	1,1 L	111
E	1,5 L	148
A	2 L	193,5
H	2,5 L	244
B	3 L	284,5
S	4 L	390
Z	6 L	606



CODE *CODE* KODE	TYPE *TYPE* TYP	Dimensions *Dimensions* Abmessungen
C	5 L	242
U	6 L	297

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
▲ F	0,5 L		0,4 L
W	0,75 L	0,7 L	0,6 L
P	1 L	0,9 L	0,8 L
T	1,1 L	1,1 L	0,7 L
E	1,5 L	1,4 L	1 L
A	2 L	2 L	1,4 L

TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
H	2,5 L	2,4 L	2 L
■ B	3 L		2,3 L
■ S	4 L		3,4 L
■ Z	6 L		5,3 L
C	5 L	4,7 L	3,8 L
■ U	6 L		5 L

▲ In horizontal position only

■ In vertical position only

MICRO POWER - PACKS 1G SINGLEPHASE TYPE 80 DUTY S1

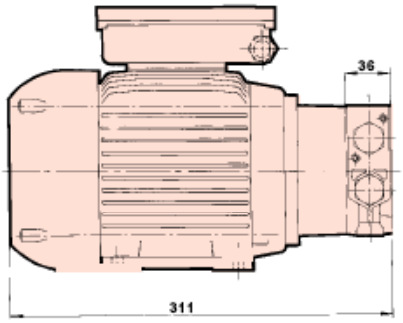
ALTERNATING CURRENT

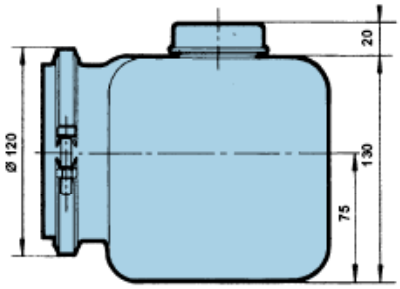
CODIFICATION

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
01	Sign Signe Zeichen	Sign Signe Zeichen	M	Sign Signe Zeichen	C	X							

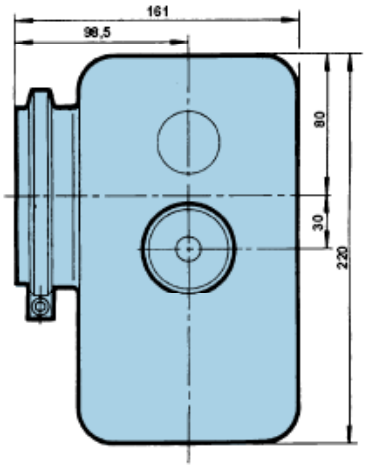
(F.T R 0180)

TYPE of TANKS (Sign - *Signe* - Zeichen IX-X)





CODE *CODE* KODE	TYPE *TYPE* TYP
M	2,8 L

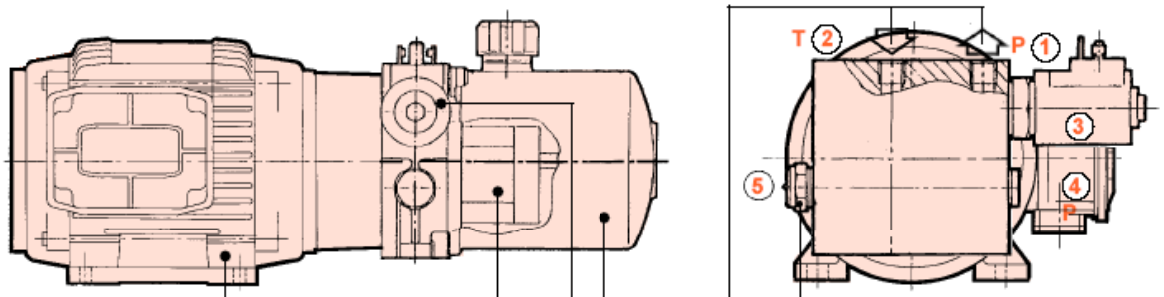


TANKS *RÉSERVOIRS* BEHÄLTER		POSITIONS *POSITIONS* BEFESTIGUNGS 1 - 3 - 4 - 5	POSITION POSITION BEFESTIGUNG 2
CODE *CODE* KODE	TYPE *TYPE* TYP	USEFUL CAPACITY *CAPACITÉS UTILES* NUTZINHALT	
■ M	2,8 L		2,28 L

■ In vertical position only

INTERFLUID Hidráulica S.L.U - Ctra. de Torrelles, 34 - E-08620 - Sant Vicenç dels Horts – Barcelona - España
Telf : +34 93 656.27.97 - Fax : +34 93.676.98.25 - www.interfluid.es

ALTERNATING CURRENT



Specify the required setting full flow of By-pass

0 1	PE	6	T	100 T	X	14	H 1	20	X	2	N	130
I Sign	II Sign	III Sign	IV Sign	V VI Sign	VII Sign	VIII Sign	IX X Sign	XI Sign	XII Sign	XIII Sign	XIV Sign	

PUMP TYPE Series 0

GENERATION 1

MOTOR TYPE according to F.T R 0184

VOLTAGE

220 - 230 Volts - 60 Hz	3
110 - 115 Volts - 60 Hz	5
230 / 400 Volts - 50 Hz	6
230 / 400 Volts - 60 Hz	7
100 Volts - 50 Hz	8
220 - 230 Volts - 50 Hz	9
Special Voltage	*
without Motor	X

CURRENT

Three phase	T
Single phase	M
without Motor	X

PUMP CAPACITY

0,25 cc / rev	0,015 Cubic / inch	025
0,50 cc / rev	0,030 Cubic / inch	050
0,75 cc / rev	0,045 Cubic / inch	075
1 cc / rev	0,060 Cubic / inch	100
1,25 cc / rev	0,075 Cubic / inch	125
1,50 cc / rev	0,090 Cubic / inch	150
2 cc / rev	0,120 Cubic / inch	200

TYPE of SHAFT

Tang	T

RELAY

without Relay	X

DECOMPRESSION DEVICE on port (3)

without Decompression	XX
Special Decompression	**

Decompression by electrical control

	VNF	VNQ	VLB
12 Volts =	12	22	32
24 Volts =	14	24	34
36 Volts =	16	26	36
48 Volts =	18	28	38
24 Volts ~	15	25	35
48 Volts ~	17	27	37
110 Volts ~	11	21	31
220 Volts ~	13	23	33

Manual lowering valve	20
Decompression by a 3 ways valve with free flow	40

■ In vertical position only.

▲ In horizontal position only.

◆ Mounting with check valve only up to Ø 2,5 Maxi.

Nb : In Standard mounting

Mounting of a V.N.F in decompression device.

The tank filling cap and the motor terminals are mounted on ports 1 and 2 side.

ATTENTION in case of a mounting without electric motor, specify the bell housing and coupling references after the Codification.

RELIEF VALVE

P	Sealed
N	not sealed

SETTING PRESSURE (full flow of By-pass) of the ADJUSTABLE RELIEF VALVE (on port (6))

1	0 to 110 Bar
2	90 to 300 Bar

FLOW RESTRICTOR oder FLOW LIMITOR ◆

X with Flow restrictor oder Flow Limitor

A Ø 0,8	F Ø 1,6	L Ø 2,2	S Ø 3
B Ø 1	Z Ø 1,7	M Ø 2,3	T Ø 3,2
C Ø 1,2	G Ø 1,8	N Ø 2,4	U Ø 3,4
D Ø 1,3	H Ø 1,9	P Ø 2,5	V Ø 3,6
E Ø 1,4	J Ø 2	Q Ø 2,6	* Special Ø
Y Ø 1,5	K Ø 2,1	R Ø 2,8	

PORTS

10	1 Port (1) (Pressure + Return)
11	1 Port (1) + Flow restrictor on port (31)
12	1 Port (1) + Flow Limitor on port (3)
20	2 Ports (1) and (2) ▼ (second return) (without hose on port (31))
21	2 Ports (1) and (2) + Flow restrictor on port (31)
22	2 Ports (1) and (2) + Flow Limitor on port (3)
23	2 Ports (1) and (2) ▼ (second return) (with hose on port (31))
**	Special outlet port
40	Special blok on ports

FIXING POSITIONS (F.T R 0187)

1 Horizontal	3 Position 3	5 Position 5
2 Vertical	4 Position 4	

TANKS

F ▲	0,5	L	0,13 US/Gallon Ø	B ■	3	L	0,79 US/Gallon Ø
W	0,75	L	0,20 US/Gallon Ø	S ■	4	L	1,05 US/Gallon Ø
P	1	L	0,26 US/Gallon Ø	C	5	L	1,32 US/Gallon ◫
T	1,1	L	0,29 US/Gallon Ø	U ■	6	L	1,58 US/Gallon ◫
E	1,5	L	0,40 US/Gallon Ø	Z ■	6	L	1,58 US/Gallon Ø
A	2	L	0,53 US/Gallon Ø	*	Special tank		
H	2,5	L	0,66 US/Gallon Ø	X	without tank		
M ▲	2,8	L	0,73 US/Gallon ◫				

MICRO POWER PACKS " CODING CHART "
ALTERNATING CURRENT VERSION 1G SERIES 0

ALTERNATING CURRENT

Frame 71 — Three-Phase Motors

II Sign Signe Zeichen	Voltage Tension Spannung III Sign Signe Zeichen	Ref.	Speed Vitesse Drehzahl rev / min t / min U / min	Power Puissance Leistung kW	Duty Service E.D	Frequency Frequence Frequenz Hz	NB Nota Nota	Bell - Housing Lanterne Flansch
NA	6	112 484	1500	0,26	S1	50	air cooled - Ventilé - belüftet	
NC	6	112 485	1500	0,50	S1	50	air cooled - Ventilé - belüftet	
NB	6	112 476	3000	0,55	S3	50	not cooled - Non ventilé - nicht belüftet	109 593
NG	6	112 423	3000	0,80	S3	50	not cooled - Non ventilé - nicht belüftet	
NH	6	112 120	3000	1,10	S3	50	not cooled - Non ventilé - nicht belüftet	
NK	6	112 874	3000	0,55	S3	50	Motors at tang - not cooled Moteurs à tenon - Non ventilé - Motoren mit Zapfen - nicht belüftet	112 871
NF	6	112 873	3000	0,80	S3	50		
NP	6	112 872	3000	1,10	S3	50		

Frame 80

II Sign Signe Zeichen	Voltage Tension Spannung III Sign Signe Zeichen	Ref.	Speed Vitesse Drehzahl rev / min t / min U / min	Power Puissance Leistung kW	Duty Service E.D	Frequency Frequence Frequenz Hz	NB Nota Nota	Bell - Housing Lanterne Flansch
PC	6	112 486	1500	0,95	S1	50	air cooled - Ventilé - belüftet	109 592

THREE-PHASE MOTORS for MICRO ELECTRO PUMP SETS and MICRO POWER PACKS

ALTERNATING CURRENT

Frame 71 — Single phase Motors

II Sign Signe Zeichen	III Voltage Tension Spannung Sign Signe Zeichen	Ref.	Speed Vitesse Drehzahl rev / min t / min U / min	Power Puissance Leistung kW	Duty Service E.D	Frequency Frequence Frequenz Hz	Condenser Condensateur Kondensator Starting Démarrage Anlauf	Condenser Permanent Permanent Permanent	NB Nota Nota	Bell - Housing Lanterne Flansch
ND	8	112 643	3000	0,75	S3	50	50-63 µF	16 µF	not cooled - Non ventilé - nicht belüftet	
NE	9	112 644	3000	0,75	S3	50	40 µF	16 µF	not cooled - Non ventilé - nicht belüftet	109 593
NF	5	112 645	3600	0,75	S3	60	25 µF	16 µF	not cooled - Non ventilé - nicht belüftet	

Frame 80

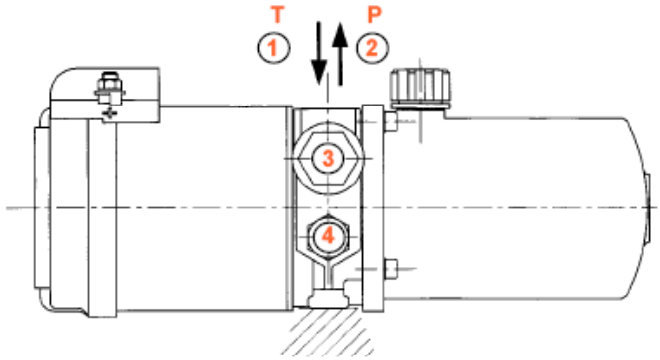
II Sign Signe Zeichen	III Voltage Tension Spannung Sign Signe Zeichen	Ref.	Speed Vitesse Drehzahl rev / min t / min U / min	Power Puissance Leistung kW	Duty Service E.D	Frequency Frequence Frequenz Hz	Condenser Condensateur Kondensator Démarrage	Condenser Permanent Permanent Permanent	NB Nota Nota	Bell - Housing Lanterne Flansch
PA	9	112 437	3000	0,75	S1	50	25 µF	16 µF	air cooled - Ventilé - belüftet	
PB	5	112 438	3450	0,75	S1	60	80 µF		air cooled - Ventilé - belüftet	109 592
PG	9	112 677	3000	1.10	S3	50	80-100 µF	25 µF	not cooled - Non Ventilé - nicht belüftet	

**	*	Special Motor - Special Voltage Moteur spécial - Tension spéciale Spezial Motor - Spezial Spannung
XX	X	without Motor - Sans Moteur - ohne Motor -

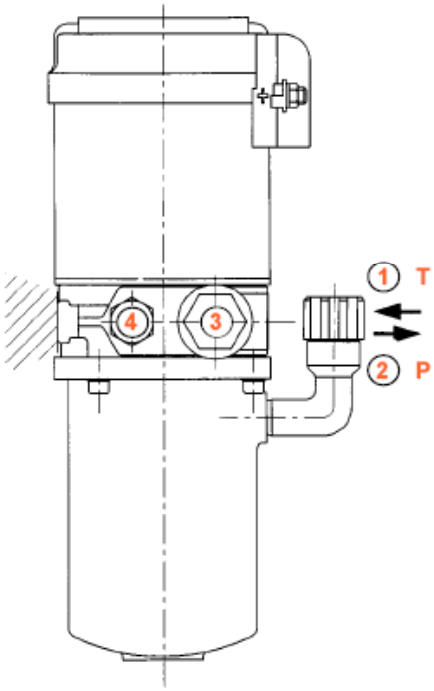
SINGLE PHASE MOTORS for MICRO ELECTRO PUMP SETS and MICRO POWER PACKS

ALTERNATING CURRENT

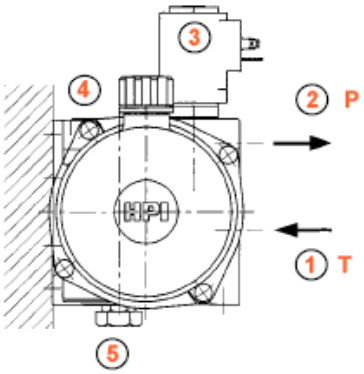
POSITION
POSITION 1
LAGE



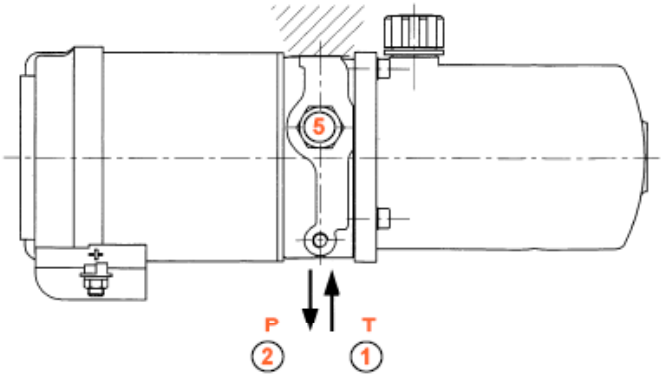
POSITION
POSITION 2
LAGE



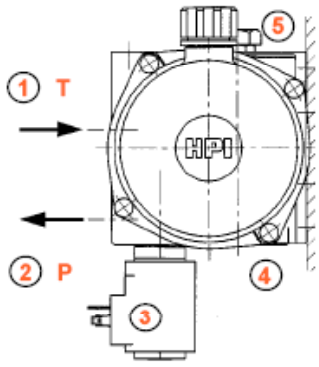
POSITION
POSITION 3
LAGE



POSITION
POSITION 4
LAGE



POSITION
POSITION 5
LAGE



FIXING POSITIONS DIRECT and ALTERNATING CURRENT of MICRO and MINI POWER PACKS

VERSION 1G

JTEKT HPI